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ABSTRACT

This course of study in painting and decorating is intended as a teaching and learning guide and presents the basic skills needed for initial employment in painting and decorating occupations. Introductory material includes an outline of general course objectives and corresponding activities to achieve the objectives, an instructional plan which suggests course length, use of the guide, teaching methods, vehicles of instruction, a bibliography of reference materials, and a listing of the titles of skill competency development jobs which correspond with specific job sheets in the body of the guide. The major portion of the guide consists of (1) job sheets, which indicate to the student what to do in performing the various jobs assigned by the instructor (sheets also include unit title, specific job title, material and equipment needed, and method of evaluation); and (2) operation sheets, which supplement the job sheets and indicate to the student how to perform the many skill competency operations necessary to complete the assigned jobs. Also included are information sheets, which supplement the job sheets and provide the student with information necessary for completing the assigned jobs with the highest possible degree of understanding. (SH)

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TRADE AND INDUSTRIAL EDUCATION

COURSE OF STUDY

FOR

PAINTING AND DECORATING

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PREFACE

In recent years, we have planned and constructed the finest of vocational education facilities and have placed fine equipment in these facilities. Equal attention must be directed to provide the teacher with the basic tools for instruction to assist in providing quality instruction.

This basic course of study is intended to be used as a teaching and learning guide. The information provides the essentials of the occupation, insuring that the students who successfully complete the course will have sufficient competencies for initial employment and ample orientation for growth and advancement. The teacher who uses this course may find it necessary to modify and supplement the material to meet the needs of specific students and the local industrial community.

This material has been prepared by a committee of teachers under the general direction of the staff of the Division of Occupational and Vocational Studies at the Pennsylvania State University in cooperation with the Trade and Industrial Education staff of the Bureau of Vocational Education of the Department of Education.

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PAINTING AND DECORATING

This course of study is designed to be used by instructors of Painting and Decorating to insure a relatively uniform curriculum in this area of Vocational Education. The committee which developed this material understands that each instructor will look at this material differently, so we encourage you to use what you can or change what you need to by adding or deleting jobs, operations and information so it fits the needs of your shop and geographic area.

The five major divisions are; (I) Orientation, (II) Hand Tools, (III) Finishing, (IV) Paper Hanging, (V) Spray Painting and (VI) Special Finishes. The second division, Hand Tools, was developed to familiarize the student with the many related hand tools used by the painter other than brushes, spray equipment and paper hanging tools.

Each instructor should keep abreast of the new materials and methods of application, and insert these materials where and when appropriate, to keep his course of study current.

Due to the limited time, few information lessons where developed, but titles are given. It is suggested that you assign or develop appropriate lessons.

We do not intend for this to be considered a finished product, instead it should be used as a vehicle with which to work from, or a starting point.

COURSE PHILOSOPHY

The primary function of this course in Painting and Decorating is to develop the individual into a productive, knowledgeable citizen, who is capable of providing for himself and his charges in a manner that is beneficial to himself and the community in which he lives.

The student who completes the Painting and Decorating course will be better prepared to pursue a livelihood in this field as he will have been exposed to the latest training techniques and related information. The instructions provided should develop the skills and knowledge of the trade in the student to his fullest potential so that he can enter employment in the trade as a knowledgeable apprentice.

Differences in students abilities can be provided for through levels of work assignment.

GENERAL COURSE OBJECTIVES

Objectives	Activities to Achieve Objectives
1. To develop an understanding of the importance of protective coatings.	1. Reading assignments, trade magazines, reference books 2. Film strips from paint manufacturers 3. Demonstrate effects of weather uncoated materials 4. Study product test reports.
2. To develop a knowledge of products and application procedures.	1. Film strips from paint manufacturers 2. Film strips from tool manufacturers 3. Reading assignments, trade magazines 4. Projects and application exercises. 5. Quiz on products.
3. To develop the skill and knowledge needed to select and use brushes, rollers, spray equipment.	1. Demonstrate proper use of different types of tools and their use. 2. Provide work jobs as close to industrial standards (production, neatness, etc.) as possible. 3. Show film on equipment manufacturing. 4. Test on standard job and grade on ability, neatness, procedure, and time. 5. Provide information sheet on care of each tool or piece of equipment.
4. To develop specific skills and related knowledge, estimating and chemical science.	1. Provide instruction a. Oral b. Demonstrate c. Film Strips 2. Provide situations or jobs where information is used. 3. Written exams 4. Provide job sheets, operation sheets, information sheets, and assignment sheets for individual use.
5. To develop an understanding of labor and management.	1. Assignment readings in trade magazines 2. Arrange talks by men in industry representing labor and management 3. Discussions on problems dealing with: a. Labor Unions b. Responsibilities of management c. Provide suggestion box for running a shop
6. To develop good work habits and pride in accomplishment.	1. Provide specific standards for each job.

	2. Provide situations that are as close to actual field working conditions as possible. 3. Discuss the need for proper work habits and procedures 4. Have student appraise his own work 5. Measure students' work objectively 6. Have student make a procedure sheet for job to be done.
7. To develop occupational safety habits and understandings.	1. Display safety posters. 2. Have safety sheets and talks on all jobs. 3. Demonstrate correct safety practices and procedures on all jobs. 4. Show film on safety.
8. To develop the ability to cooperate with co-workers and leadership qualities.	1. Have students work in groups where possible. 2. Encourage students to help and seek help from one another. 3. Set up a shop management council. 4. Have shop foreman, job foreman, etc. 5. Encourage students to participate in student organizations such as VICA, student council, etc.
9. To develop the proper attitude for life.	1. Have students set up codes of dress, behavior, etc. 2. Provide situations for or where the student has to make decisions on his own. 3. Have talk sessions on work, local and shop problems, current events 4. Set a proper example 5. Provide individual instruction to bring each student to his fullest abilities and recognize them.

PLAN OF INSTRUCTIONAL PRACTICE

The effectiveness of instruction depends on the careful organization and control of the routine details concerning the management of the pupil, equipment, teaching methods and the physical laboratory arrangement. The teacher must determine the best management practices and formulate a very definite statement of the basic standards to be followed in teaching the course to bring about the attainment of the learning goals.

Length of Course

The course of study is designed as a three-year curriculum involving approximately 1500 hours of class and laboratory instruction, primarily for beginning students who are interested in securing employment in the occupation. Where job entry is the goal, the entire course of study would be appropriate. In adults programs, it may be found that a single thrust is the student's goal, therefore, the course content may be restricted to a single major division.

Use of This Course of Study

The material has been arranged in major divisions of the trade. In most cases, the material contained in the first division must be learned before progressing to the next division. The nature of some trade areas permit entry into random divisions after the introductory basic material is covered. Some divisions of the occupation can be taught separately.

The content of this course material consists of job sheets (yellow) and skill competency sheets (white). The skill competency sheets are simply written and highly illustrated. These sheets outline the manipulative handling of tools and materials that make up the doing part of the occupation. The sequence of the skill competency sheets (SC) is based on the organization of the job sheets. Notice that job number one incorporates the basic skill competencies and job number two includes additional skill competencies. This cumulative reuse of the skill competencies continues throughout the entire job sheet collection. After a number of jobs have insured that the student has been sufficiently exposed to a skill competency, no further reference to that skill competency is made.

The job sheets are arranged in an order that gradually exposes the skill competencies. The purpose of the job sheet is to insure the introduction of each operation or skill competency in a controlled manner. Look at this group of jobs as a framework that can be added to, by you, to meet local needs. You may decide to design new or different jobs that will be inserted between or replace any of the suggested jobs. In time you will be able to custom design a course of study for your own needs. There will be little or no need to vary the skill competency sheets.

Teaching Methods

The following procedures are offered as the most productive in achieving the desired results in this course.

1. Demonstrations--Operations and procedures will be demonstrated while the students observe. The purpose is to show how things are done correctly and safely.

2. Class Discussion--A method of teaching in which the students and the teacher take part, directed and controlled by the teacher to a predetermined objective. Technical and related information common to a class or group of students will be presented in this manner. Evaluation of the material presented in this manner should be done by objective testing.

3. Laboratory Talks--Short, informal talks by the instructor during laboratory activities to convey information pertinent to the activity in progress. Not scheduled and not timed, this activity should occur at any appropriate time and for periods of varying duration.

4. Observation and Input--This teacher activity should take place at all times when students are performing psychomotor skills. The purpose is to reinforce a previously given demonstration, class discussion, or laboratory talk, or to update the students' skills by further demonstration and/or further disclosures of technical and related information.

Vehicles of Instruction

The application phase of this course will consist of work assignments kept as close to industrial conditions as a shop situation permits. Job, operation and information sheets will be provided, so that students of different levels of skill and ability can understand them. The students will be encouraged to progress as rapidly as possible, and achieve the standard set for the course. Special attention will be given to the unique student, offering special assistance so that slow as well as fast students may progress at their own rate of speed.

Items to be Developed by Teacher

The following items are peculiar to the local school situation and need to be developed by each local instructor.

. Standards of attainment required

. Pupil work evaluation

. Shop controls and regulations
The following steps should be taken to insure the greatest possible degree of safety in the shop and to develop an awareness of safety in general.

1. All machines will be equipped with safety devices where applicable.

2. Safety instruction sheets shall be provided for all machines and equipment.
3. Protective equipment must be worn by students while operating all machines.
4. Floor space around machine areas will be marked off to designate restricted areas.
5. Students will be instructed concerning safe working apparel.
6. A periodic inspection will be made, using the National Standard School Safety Inspection Check List.
7. All injuries will be reported to the instructor immediately.

. Pupil personnel organization

Standards of attainment and student evaluation should be established and maintained by the local instructor with student participation. Administration of shop regulations, tool checks, records and forms are more a teacher activity and can be determined only by what the local situation dictates.

The following is included to serve as a guide:

- Superintendent
- Stock Foreman
- Tool Foreman
- Safety Engineer
- Clean-Up Foreman

Duties of the elected persons will be as follows:

A. Superintendent
   1. Assist teacher in all shop administrative duties.
   2. Supervise the work of the tool foreman, stock foreman, safety engineer and clean-up foreman.
   3. Have supervisory control of the bulletin board.
   4. Meet shop visitors and direct them to the teacher.

B. Stock Foreman
   1. Issures all supplies.
   2. Keeps stockroom in order.
   3. Help prepare stock for distribution.
   4. Maintain inventory.

C. Tool Foreman
   1. Issues all supplies.
   2. Keep tool boards in good order.
   3. Repair damaged tools.
   4. Report any missing tools.
   5. Make sure tools are clean.

D. Clean-Up Foreman
   1. Assign clean-up jobs to individual students.
   2. Check at end of work period for completion of all clean-up jobs.

E. Safety Engineer
   1. Oil machinery at designated periods.
   2. Check regularly the condition and operation of all safety devices.
   3. Remove objects from work areas which may be hazardous.
   4. Post safety posters.

. Method of tool check

. Records and forms

. Student Planning Organization

Students will be taught how to plan their jobs, prepare their work procedures, and estimate the amount and cost of material to be used. Regular planning sheets will be provided for this purpose.

A student-planning committee will be selected. The function of this committee will be to screen any suggestion that the students think is necessary for the improvement of shop instruction.

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Association-Sterling Films.

"The Armstrong World of Interior Design."
Armstrong Cork Company.

"College of Roller Knowledge."
EZ Painter Corporation, 18 minutes, 16 mm, color.

"The Color Hanger."
Painting and Decorating Institute, (Theme--Apprenticeship), 30 min., 16 mm, color.

"Color, The Magic Touch."
Association-Sterling Films.

"Compressed Air Power."
Modern Talking Picture Service, Inc.

"Creative World of Interior Design."
Modern Talking Picture Service, Inc.

"Inside Four Houses."
Armstrong Cork Company.

"Making the Mose of the Spray Painting Method."
DeVilbiss Company, 45 minutes, 16 mm, color.

"The Master's Touch."
Rhom and Hass Company, (Theme--Acrylics), 32 minutes, 16 mm, color.

"The Look of Quality."
Armstrong Cork Company.

"Ransburg Electrostatic Spray."
Markey's Ideal Pictures.

"Shaping the Future with Gypsum Wallboard."
Gypsum Association, Chicago.

"Shaping the Future with Lath and Plaster."
Gypsum Association, Chicago.

"Steel Spans the Chesapeake."
Motion Picture Service.

"That's My Line."
Binks Company, (Theme--Spray Painting), mm slides.

"Trigger Happy Harry."
Association-Sterling Films.

"Wall to Wall Decorating."
Modern Talking Picture Service, Inc.

"Wonderful World of Color."
17 minutes, 16 mm, color.

COURSE OUTLINE

Instructional Title: Painting and Decorating   Code: 17.1005

Occupation Description

Applies coats of paint, varnish, stains, enamels or lacquers to decorate and protect interior and exterior surfaces, using sandpaper, paint remover, scraper, wire brush or blow torch to prepare surfaces for finishing. Fills nail holes, cracks and joints with putty, plaster or other filler. Selects premixed paints or prepares paint to match specified colors by mixing required portions of pigment, oil, thinning material and drying substances. Paints surfaces with brush, spray gun or painting roller. Simulates wood grain, marble, brick, and other effects. Creates special effects by applying paint with cloth, brush, sponge or fingers. May also hang wallpaper and fabrics.

Major Divisions of the Occupation

I. Orientation

II. Small Tools

III. Finishing

IV. Wallcoverings

V. Spray Painting

VI. Special Finishes

Skill Competency Development Jobs

The following is a list of suggested Jobs, assigned by the teacher, to provide experiences for the student to assist him in developing competencies of the Carpentry trade. These are Job Titles only. The numbers correspond with the identifying numbers on the Job Sheet that follow.

Unit I. Orientation

Unit II. Small Tools

J-2-1	Drive Nails with Claw Hammer
J-2-2	Remove Bent Nails with Claw Hammer
J-2-3	Use the Straight Claw Hammer
J-2-4	Drive Tacks
J-2-5	Measure Stock
J-2-6	Set Finish Nails
J-2-7	Remove Nails with Nail Claw
J-2-8	Mark Parallel Lines
J-2-9	Mark Line Square to Edge
J-2-10	Remove Wood with Chisel
J-2-11	Square Ends on Board
J-2-12	Cut Off End of Board
J-2-13	Rip Cut Edge of Board
J-2-14	Lay Out and Drill Hole
J-2-15	Drill Hole Using an Automatic Push Drill
J-2-16	Countersink Holes
J-2-17	Drill a 2¼" Hole
J-2-18	Chamfer Edges
J-2-19	Plane with Grain
J-2-20	Drive Screws
J-2-21	Drive Wood Screws with Spiral Screwdriver
J-2-22	Sharpen Cabinet Scraper
J-2-23	Remove Runs or Scratches in Finish with Cabinet Scraper

J-2-24	Sharpen Hook Blade Scraper
J-2-25	Remove Scratches with Hook Blade Scraper
J-2-26	Cut Metal Stock
J-2-27	Lay Out 4" Radius
J-2-28	Cut Radius
J-2-29	Clamp Wood
J-2-30	Glue Wood Stock
J-2-31	Clamp Stock to Table
J-2-32	Glue Up Wood Stock
J-2-33	Glue Broken Wooden Rod
J-2-34	Remove Foreign Material from Edge of Metal
J-2-35	Remove Dents and Smooth Surface with a Belt Sander
J-2-36	Remove Imperfections on Wood Surface
J-2-37	Hold and Tighten Nuts and Bolts With Pliers and Screwdriver
J-2-38	Cut Compound Mitre with Hand Saw
J-2-39	Set Up Tubular Scaffold
J-2-40	Set Up and Use Rolling Scaffold
J-2-41	Shake Paint
J-2-42	Use Jiffy Mixer
J-2-43	Snap a Line
J-2-44	Cut Materials with Utility Knife
J-2-45	Cut Drywall
J-2-46	Use Plumb Bob
J-2-47	Use Razor Scraper
J-2-48	Paint Pipe
J-2-49	Use Roller Ramp

Unit III. Finishing

J-3-1	Fold and Cut Sandpaper For Two Sanding Pads
J-3-2	Fold and Cut Sandpaper For Three Sanding Pads

J-3-3	Sand Wood Panel with Coarse Grade Sandpaper
J-3-4	Sand Wood Panel with Medium Grade Sandpaper
J-3-5	Sand Wood Panel with Fine Grade Sandpaper
J-3-6	Open Material Container
J-3-7	Hand Mix Container of Paint
J-3-8	Apply Stain with a Cloth
J-3-9	Hold a Paint Brush
J-3-10	Bridle a Paint Brush
J-3-11	Load a Paint Brush
J-3-12	Varnish Wood Panel
J-3-13	Recoat the Wood Panel with Varnish
J-3-14	Repair Nail Holes or Surface Imperfections
J-3-15	Recoat the Wood Panel with Varnish
J-3-16	Remove Coating from Panel with Paint Remover
J-3-17	Paint Panel with Pigmented Coating
J-3-18	Paint Panel Door
J-3-19	Remove Paint from a Painted Panel Using Hand Scrapers
J-3-20	Recoat with Pigmented Coating
J-3-21	Paint a Louvre Door or Shutter
J-3-22	Practice "Cutting-In" to a Line on a Flat Surface
J-3-23	Paint Louvres on Louvred Door with a Contrasting Color
J-3-24	Practice Cutting Glass to Size
J-3-25	Practice Bedding Glass and Installing Glazing Points
J-3-26	Practice Glazing Glass
J-3-27	Replace Glass in Window Sash
J-3-28	Practice Setting Up a Step Ladder
J-3-29	Paint a Window Sash and Frame Installed in a Mock Up
J-3-30	Practice Applying Caulking Compound
J-3-31	Practice Setting Up an Extension Ladder

J-3-32	Practice Moving an Extension Ladder
J-3-33	Practice Setting Up a Ladder Jack Scaffold
J-3-34	Practice Working on a Ladder Jack Scaffold
J-3-35	Paint the Window and Siding of a Two Floor Mock-Up
J-3-36	Remove Coating with Heat
J-3-37	Remove Rust and Scale from Metal
J-3-38	Tape a Flat Wallboard Joint
J-3-39	Spot Wallboard Nails
J-3-40	Tape an Inside Wallboard Joint
J-3-41	Finish an Outside Corner
J-3-42	Patch a Plastered Wall
J-3-43	Patch a Wall Surface with Paste Spackle
J-3-44	Mix and Match Paint to an Existing Color
J-3-45	Paint a Wall with a Paint Roller
J-3-46	Patch Masonry Joints

Unit IV. Wallcovering

J-4-1	Prepare Walls, Drywall
J-4-2	Prepare Walls, Plaster
J-4-3	Estimate Wallpaper Needs
J-4-4	Remove Wallcovering
J-4-5	Setting Up Folding Table
J-4-6	Cut Short Lengths of Random Match Paper
J-4-7	Paste Wallpaper from J-4-6
J-4-8	Practice Marking Plumb Line
J-4-9	Hand and Seam Strips of Paper from Job J-4-7
J-4-10	Measure Wall Height
J-4-11	Cut Straight Pattern Match
J-4-12	Cut Drop Match Wallpaper
J-4-13	Hang Straight Match Paper Cut In J-4-11

J-4-14	Hang Drop Match Cut in J-4-12
J-4-15	Hang Paper Around an Inside Corner
J-4-16	Hang Paper Around an Outside Corner
J-4-17	Hang Paper Around Door Casing
J-4-18	Hang Wallpaper Around a Window
J-4-19	Paper an Arched Opening
J-4-20	Hang Paper on Ceiling
J-4-21	Hang Felt Wallcovering
J-4-22	Hang Foil Wallcovering

Unit V. Spray Painting

J-5-1	Prepare Paint
J-5-2	Assemble a Conventional Spray Gun
J-5-3	Set Air Regulator
J-5-4	Practice Spray Painting
J-5-5	Spray Horizontal Surface
J-5-6	Spray Piece of Furniture (or Other Appropriate "Live" Job)
J-5-7	Spray Vertical Surface
J-5-8	Spray Slender Surface
J-5-9	Spray Corners
J-5-10	Practice Air Brush Set-Up
J-5-11	Use Air Brush

Unit VI. Special Finishes

J-6-1	Prepare a Stencil Pattern
J-6-2	Apply a Stencil Pattern to a Panel or Wall Surface
J-6-3	Apply Textured Wall Paint

Skill Competencies and Information Lessons

The left hand column lists the tasks or operations workers perform in the occupation which form the skill competencies required of the student. These competencies should be demonstrated by the teacher and practiced by the student.

The information lessons outline the general technical information and knowledge needed to perform the skill competencies. These items represent the common information taught on a group instruction basis. Additional information will emerge to be taught on an individual student basis as pupils work on the skill competencies.

The numbers preceding each title correspond to the identifying numbers of the operation sheets and the information sheets. The information lessons relate to the particular major unit of instruction but do not necessarily relate to corresponding skill competency numbers.

Unit I. Orientation

Skill Competencies/Operations The student will be able to:	Information Lessons	
	IL-1-1	History of the trade
	IL-1-2	Trade status--today
	IL-1-3	Job opportunities
	IL-1-4	Procedures and organization
	IL-1-5	Hygiene
	IL-1-6	Housekeeping
	IL-1-7	Shop safety

Unit II. Small Tools

	Skill Competencies/Operations The student will be able to:	Information Lessons
SC-2-1	Drive Nails with a Claw Hammer	
SC-2-2	Pull Headless Nails with a Claw Hammer	
SC-2-3	Use a Ripping Hammer	
SC-2-4	Use a Magnetic Tack Hammer	
SC-2-5	Lay Out Stock to Length by Measuring	
SC-2-6	Set Finish or Casing Nails	
SC-2-7	Pull Nails with a Nail Puller	
SC-2-8	Layout Parallel Lines with a Combination Square	
SC-2-9	Lay Out a Square Line on Stock with Framing Square	
SC-2-10	Chisel Across Grain	
SC-2-11	Lay Out a Square Line on Stock with the Combination Square	
SC-2-12	Cut Stock to a Line With a Handsaw	
SC-2-13	Install Drill Bit in Drill Motor Chuck and Drilling Holes	
SC-2-14	Drill Holes with an Automatic Push Drill	
SC-2-15	Bore Holes with Brace and Auger Bit	
SC-2-16	Use an Expansion Bit	
SC-2-17	Chamfer and Bevel with Hand Plane	
SC-2-17A	Plane the End of Stock with a Hand Plane	

Skill Competencies/Operations The student will be able to:		Information Lessons
SC-2-18	Plane the Edge of Stock with a Hand Plane	
SC-2-18A	Plane the Face of Stock with a Smoothing Plane	
SC-2-19	Drive and Remove Screws with the Blade Screwdriver	
SC-2-19A	Adjust, Tighten, Drive and Remove Screws with a Phillips Head Screwdriver	
SC-2-20	Drive and Remove Screws with a Brace and Driver Blade	
SC-2-21	Drive or Remove Screws with a Spiral Screwdriver	
SC-2-22	Sharpen a Cabinet Scraper	
SC-2-23	Remove Runs or Scratches with Cabinet Scraper	
SC-2-24	Sharpen Hook Blade Scraper	
SC-2-25	Smooth Wood with a Hooked Scraper	
SC-2-26	Cut Materials with a Hack Saw	
SC-2-27	Scribe Arcs with Dividers or Compass	
SC-2-28	Cut Curves with a Compass Saw	
SC-2-29	Hold Material with Hand Spring Clamps	
SC-2-30	Spread Glue	
SC-2-31	Use C-Clamp	
SC-2-32	Clamp Wide Pieces of Stock with Bar Clamps	

Skill Competencies/Operations The student will be able to:		Information Lessons
SC-2-33	Clamp Pieces of Stock Face to Face	
SC-2-34	Use the Portable Disc Sander	
SC-2-35	Use a Belt Sander	
SC-2-36	Use a Finishing Oscillating Sander	
SC-2-37	Hold Nuts with Pliers	
SC-2-38	Cut Simple or Compound Miter with a Handsaw	
SC-2-39	Clamp Miters (Miter Clamps)	
SC-2-40	Erect Tubular Scaffolding	
SC-2-41	Erect Rolling Scaffold	
SC-2-42	Use Paint Shaker	
SC-2-43	Mix Paint with Jiffy Mixer	
SC-2-44	Mark a Long Line Using a Chalk Line	
SC-2-45	Cut Material with Utility Knife	
SC-2-46	Cut Strips of Drywall with Rule and Utility Knife	
SC-2-47	Use a Plumb Bob	
SC-2-48	Use a Razor Scraper	
SC-2-49	Use a Paint Mitt to Paint Pipe and Metal Beams	
SC-2-50	Use Roller Ramp	

Unit III. Finishing

Skill Competencies/Operations
The student will be able to:

SC-3-1	Fold and Cut a Sheet of Abrasive Paper into Two Sanding Pads for Hand Sanding
SC-3-2	Fold and Cut a Sheet of Abrasive Paper into Three Sanding Pads for Hand Sanding
SC-3-3	Remove Large Pebbles of Grit from Abrasive Paper
SC-3-4	Hand Sand New Wood Using a Sanding Block
SC-3-5	Hand Sand Curved Surfaces
SC-3-6	Spread Drop Cloths
SC-3-7	Prepare a Container of Paint for Painting
SC-3-8	Stir Paint with a Paint Paddle
SC-3-9	Strain Paint with Cheese Cloth
SC-3-10	Apply Stain with a Cloth
SC-3-11	Hold a Paint Brush
SC-3-12	Bridle a Paint Brush
SC-3-13	Load a Paint Brush
SC-3-14	Clean a Paint Brush
SC-3-15	"Lay On" and Brush Out Paint
SC-3-16	Color Glazing Compound with Tinting Color
SC-3-17	Fill Nail Holes with Putty Using Putty Knife
SC-3-18	Use a Pointed Putty Knife
SC-3-19	Scrape Softened Coatings from Surfaces Using a Putty Knife

Information Lessons

IL-3-1	Abrasive Papers
IL-3-2	Types and Styles of Paint Brushes
IL-3-3	Construction of a Paint Brush
IL-3-4	Types of Bristles Used to Make Paint Brushes
IL-3-5	Solvents Used for Brush Cleaning
IL-3-6	The Composition of Paint
IL-3-7	Steps in Painting Paneled Door
IL-3-8	Paint a Window Sash and Frame
IL-3-9	Terms Used in Reference to the Construction of an Interior Window
IL-3-10	Safety Factors in Placing an Extension Ladder
IL-3-11	Safety Rules When Working With and From Straight or Extension Ladders
IL-3-12	Repainting Wood Surfaces--Types of Paint Failures and Their Causes
IL-3-13	Paint Failures Due to Moisture
IL-3-14	Remove Loose Wallboard Surface Paper
IL-3-15	Inspect Wallboard Nailing
IL-3-16	Extension Poles
IL-3-17	Paint Systems (Exterior)
IL-3-18	Kinds of Siding
IL-3-19	Kinds and Uses of Cleaning Compounds

Skill Competencies/Operations The student will be able to:	
SC-3-20	Remove Softened Paint from a Surface with Steel Wool
SC-3-21	Scrape Paint from Curved Surfaces with Molding Scrapers
SC-3-22	"Cut-In" The Exterior of a Window Sash
SC-3-23	Cut Glass
SC-3-24	Apply Bedding Glaze and Set Glass in Window Sash
SC-3-25	Install Glazing Points (Push Points)
SC-3-26	Glaze Window Sash with Putty Knife
SC-3-27	Remove Broken Glass and Clean Rabbet of Window Sash
SC-3-28	Set Up and Use Step Ladders
SC-3-29	Prepare Caulking Tube for Operation
SC-3-30	Use a Caulking Gun
SC-3-31	Erect Extension Ladders (One Man)
SC-3-32	Erect Extension Ladders (Two Man)
SC-3-33	Carry Ladder in Upright Position
SC-3-34	Erect a Ladder Jack Scaffold
SC-3-35	Mount and Dismount Outside Ladder Jack Plank from Right Ladder
SC-3-36	Use Pot Hook
SC-3-37	Operate Electric Paint Remover
SC-3-38	Light a Torch

Information Lessons	
IL-3-20	Paint Removers
IL-3-21	Power Tools for Removing Paint
IL-3-22	Hand Tools for Removing Paint
IL-3-23	Burning Off Paint (Safety Factors)
IL-3-24	Power Sanding Tools
IL-3-25	Safety In the Use of Tools
IL-3-26	Materials for Patching Cracks and Joints
IL-3-27	Types of Wire Brushes (Hand and Machine)
IL-3-28	Acids Commonly Used and Their Safe Use
IL-3-29	Metal Portable Scaffolding (Types and Uses)
IL-3-30	Picks; Allowable Weights and Materials They are Made Of
IL-3-31	Drops; Materials, Sizes, Weights, Etc.
IL-3-32	Care and Storage of Drops
IL-3-33	Stains: Causes and Their Treatments
IL-3-34	Primers and Related Finish Coats
IL-3-35	Why and How to Thin Paints
IL-3-36	Types of Rollers
IL-3-37	Storage adn Care of Scaffold Planks and Ladders
IL-3-38	Conditions which Require Caulking
IL-3-39	Types of Caulking Materials
IL-3-40	Types of Caulking Guns

Skill Competencies/Operations The student will be able to:	
SC-3-39	Remove Paint with a Propane Torch
SC-3-40	Mix Powdered Joint Compound
SC-3-41	Tape and Finish Wallboard
SC-3-42	Tape and Finish an Inside Wallboard Corner with a Corner Taping Trowel
SC-3-43	Cover or "Spot" Wallboard Nails
SC-3-44	Finish an Outside Wallboard Corner
SC-3-45	Spackle a Wall with a Broadknife
SC-3-46	Use a Triangular Trowel to Spackle Walls
SC-3-47	Knife a Surface with a Breadknife
SC-3-48	"Cut-In" a Ceiling Corner
SC-3-49	Load a Dip Type Roller
SC-3-50	Apply Paint with Roller
SC-3-51	Spin a Brush or Roller Cover with a Hand Spinner
SC-3-52	Remove loose mortar with a Chisel
SC-3-53	Use a Joint or Tuck Trowel

Information Lessons	
IL-3-41	Types of Glazing Tools
IL-3-42	Types and Use of Block Fillers
IL-3-43	Methods of Applying Block Fillers
IL-3-44	Types of Masonry Sealers
IL-3-45	Types of Metals and Related Primers
IL-3-46	Protective Coatings for Metals
IL-3-47	Types of Chemical Paint Removers for Interior Work
IL-3-48	Primers and Sealers for Interior Work
IL-3-49	Reason for Bridling a Paint Brush
IL-3-50	Practical Painting Procedures for Interior Work
IL-3-51	Care and Storage of Paint Brushes
IL-3-52	Wood Patching Materials
IL-3-53	Use of Duster, Tack Rag or Vacuum
IL-3-54	Characteristics of Gloss, Semi-Gloss and Flat Finishes
IL-3-55	Tools Used for Finishing Dry Wall
IL-3-56	Dry Wall Joint Compounds
IL-3-57	Plastering Patching Methods
IL-3-58	Plaster Patching Materials
IL-3-59	Types and Uses of Rollers, Covers, Pans and Accessories
IL-3-60	Roller Cover Textures and Their Uses

Skill Competencies/Operations The student will be able to:		Information Lessons
	IL-3-61	Tinting Systems: Colors-In-Oil-Universal Colorants
	IL-3-62	Purpose of Tinting Bases
	IL-3-63	Use of the Color Wheel
	IL-3-64	Color Terms--Hue, Tint, Shade, Tone, Chroma and Value
	IL-3-65	Psychology of Color
	IL-3-66	Light's Affect on Color

Unit IV. Wallcoverings

Skill Competencies/Operations The student will be able to:	
SC-4-1	Charge and Use of a Wallpaper Steamer
SC-4-2	Set Up Paste Table (Box Type)
SC-4-3	Cut to a Line with a 10" Paper Shears
SC-4-4	Mix Paste with a Paste Whip
SC-4-5	Use Folding Paste Pail Stand
SC-4-6	Apply Paste with a Brush
SC-4-7	Apply Paste with a Roller
SC-4-8	Fold Pasted Paper
SC-4-9	Use a Plumb Bob
SC-4-10	Unfold and Position Paper to a Vertical Line
SC-4-11	Smooth Wall Coverings with a Brush
SC-4-12	Roll Seams
SC-4-13	Replace Razor Blades in Razor-Knife
SC-4-14	Trim Wallpaper Using a Braodknife as a Straightedge
SC-4-15	Cut to Ceiling or Base with Paper Shears
SC-4-16	Relieve Material over Corner Molding with Shears
SC-4-17	Cut Wall Covering with Straightedge

Information Lessons	
IL-4-1	Surface Preparation Procedures for Wallpaper
IL-4-2	Figure Wallpaper Requirements--Square Footage Method
IL-4-3	Types of Paper Paste
IL-4-4	Types of Wallpaper Pattern Matches - The Straight Match
IL-4-5	Types of Wallpaper Pattern Matches - The Drop Match
IL-4-6	Razor Knife Holder
IL-4-7	Hanging Wallcovering Around Inside and Outside Corners
IL-4-8	Hanging Wallcovering Around Doors and Windows
IL-4-9	Wallpapering an Arch Opening
IL-4-10	Hanging Ceiling Paper
IL-4-11	Wallcover Removing Tools, Steamers, Sprayers and Scrapers
IL-4-12	Wallsizes
IL-4-13	Establishing Starting and Finishing Lines
IL-4-14	Wallcovering Tools and Equipment
IL-4-15	Safety While Trimming Around Electrical Outlets
IL-4-16	Lining Materials
IL-4-17	Purpose of Lining a Wall
IL-4-18	Types and Characteristics of Muslin
IL-4-19	Types and Characteristics of Oil Fabric Wallcovering

Skill Competencies/Operations The student will be able to:	Information Lessons	
	IL-4-20	Types and Characteristics of Grass Cloth
	IL-4-21	Characteristics of Vinyl Wallcovering
	IL-4-22	Characteristics of Foil Wallcovering
	IL-4-23	Characteristics of Burlap Wallcovering

Unit V. Spray Painting

Skill Competencies/Operations The student will be able to:	
SC-5-1	Thin Paint for Spraying
SC-5-2	Disassemble and Assemble a Conventional Air Spray Gun
SC-5-3	Use and Adjust Air Regulator
SC-5-4	Clean a Spray Gun
SC-5-5	Spray Paint a Flat Horizontal Surface
SC-5-6	Spray Paint Vertical Surfaces
SC-5-7	Spray Paint Narrow or Slender Surfaces
SC-5-8	Spray Paint Inside and Outside Corners
SC-5-9	Fill an Air Brush
SC-5-10	Clean an Air Brush
SC-5-11	Hold an Air Brush
SC-5-12	Operate an Air Brush

Information Lessons	
IL-5-1	Faulty Spray Patterns--Causes and Remedies
IL-5-2	Spray Painting--Spraying Faults, Gun Failure--Remedies to Correct These Problems
IL-5-3	Types of Wood and Wood Fillers
IL-5-4	Wood Bleaching Materials
IL-5-5	Safety in Handling Chemicals and Acids
IL-5-6	Types and Classifications of Wood Stains
IL-5-7	Kinds of Varnish and Their Characteristics
IL-5-8	Kinds and Uses of Liquid and Paste Waxes
IL-5-9	Spray Painting Systems
IL-5-10	Component Parts of Spray Systems
IL-5-11	Coating Defects--Causes and Corrections
IL-5-12	Health and Safety Factors While Spray Painting

Unit VI. Special Finishes

Skill Competencies/Operations The student will be able to:		Information Lessons	
SC-6-1	Cut Stencil with Exacto Knife	IL-6-1	Applying Textured Paint
SC-6-2	Apply a Stencil Pattern	IL-6-2	Types of Texture Paints
		IL-6-3	Tools and Procedures Used in Applying Texture Paint
		IL-6-4	Stippling
		IL-6-5	Types of Stencil Designs
		IL-6-6	Stencil Materials
		IL-6-7	Tools and Procedures Used in Cutting a Stencil

WRITTEN INSTRUCTIONAL AIDS

Introduction

Instruction sheets are aids used in developing the most effective and efficient teaching-learning situation that is possible. Four types of sheets are generally used including job sheets, operation sheets, information sheets and assignment sheets.

The Job involves a sequential performance of operations by the learner to "tryout" and develop the skill competencies (operations) of the occupation resulting in a product or service. It is the vehicle of instruction or the media by which the student practices and develops a series of skill competencies (operations). JOB SHEETS indicate to the student what to do in performing the various jobs assigned by the instructor. The jobs that will be used as vehicles of instruction in the course are listed in the COURSE OUTLINE section.

OPERATIONS are the subdivisions in the breakdown of a job. Each operation represents a process, way of doing or how to perform the particular skill competency or operation.

OPERATION SHEETS supplement the job sheets and indicate to the student how to perform the many skill competency operations necessary to complete the assigned jobs. The operations that will be taught in the course are listed in the COURSE OUTLINE section under skill competencies/operations. The operation sheets should be numbered to correspond with the Skill Competencies listed in the course outline.

INFORMATION SHEETS supplement the job sheets and provide the student with information necessary for completing the assigned jobs with highest possible degree of understanding. The information units that will be stressed in the course are listed in the course outline under information lessons. The information sheets included in this section should be numbered to correspond with the Information Lessons listed in the course outline.

ASSIGNMENT SHEETS supplement the job sheets and provide the student with mental activities necessary to learn the "knowing" that accompanies the "doing" of a trade. The student is assigned related studies or technical information to be "sought out" by the student on an individual basis through the use of problems or "exercises".

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-1

JOB: Drive Nails with Claw Hammer

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Three Types of Wood--Oak, Pine, Maple in Pieces 4" X 4" X 12"
Assorted Common Nails--16D, 10D, 8D
Assorted Finish Nails--10D, 8D, 6D

TOOLS: 16 Ounce Claw Hammer

SAFETY PRECAUTIONS:

Once nail is started, keep fingers clear.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay pieces of wood on solid surface such as floor or work bench.	
2. Drive 3 to 5 nails of each size in each different type of wood.	. SC-2-1

METHOD OF EVALUATION:

1. Nails should be driven straight.
2. No hammer marks should appear on surface.

JOB: Remove Bent Nails with Claw Hammer

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Wood Block 4 X 4 X 12
Nails

TOOLS: Claw Hammer

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-2

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Drive nail to within 1/4" of wood surface.	. SC-2-1
2. Pull nail.	. SC-2-2

METHOD OF EVALUATION:

1. Was wood damaged in process: To what extent?
2. Was nail removed properly?

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JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-3

JOB: Use the Straight Claw Hammer

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Pieces of Wood--4 X 4 X 10
Nails

TOOLS: Hammer (Straight Claw)

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Drive nails to within 1/4" of surface.	. SC-2-1
2. Remove nails.	. SC-2-3

METHOD OF EVALUATION:

1. Were proper movements used?
2. Was board damaged?

JOB: Drive Tacks

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 6 Ounce Tacks
Piece of Wood 4 X 10 X 3/4

TOOLS: Tack Hammer

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-4

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Drive tacks with tack hammer into practice board.	. SC-2-4

METHOD OF EVALUATION:

Was hammer used properly?

JOB: Measure Stock

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Pieces of Wood

TOOLS: 6' Folding Rule

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-5

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Measure various pieces of stock for size and write size on face of stock.	. SC-2-5
2. Place mark at 1", 1 3/4" and 2 1/8" from edge along length.	

METHOD OF EVALUATION:

Are all dimensions correct?

JOB: Set Finish Nails

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 4 X 4 X 10 Block of Wood
8D Finish Nails

TOOLS: Claw Hammer
Nail Set

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-6

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Drive finish nails to within 1/4" of wood surface.	
2. Set nails.	. SC-2-6

METHOD OF EVALUATION:

1. Was set held properly?
2. Were nails set to proper depth?

JOB: Remove Nails with Nail Claw

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 4 X 4 X 10 Wood Nails

TOOLS: Hammer
Nail Claw

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-7

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Drive nails completely level with surface.	
2. Remove nails using nail claw and hammer.	. SC-2-7

METHOD OF EVALUATION:

Was proper sequence of movements used?

JOB: Mark Parallel Lines

UNIT II: Small Tools

COURSE: Painting and Decorating

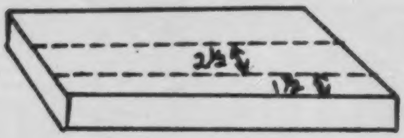
MATERIAL: Piece of Wood, 4 X 10 X 3/4

TOOLS: Pencil
Combination Square

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-8

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Select straightedge on board.	. SC-2-8
2. Measure in 1 1/2" from edge and place mark.	
3. Measure in 2 1/2" from same edge and place mark.	
4. Extend lines through length of board.	

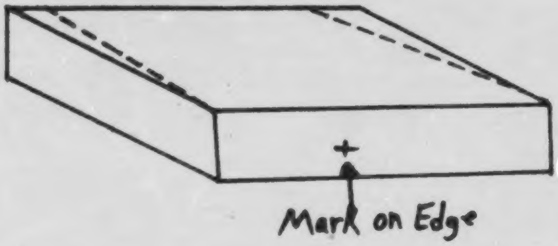


METHOD OF EVALUATION:

1. Was layout done accurately to directions?
2. Are all lines parallel?

JOB:	Mark Line Square to Edge	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-9
COURSE:	Painting and Decorating	
MATERIAL:	Piece of Wood 4 X 10 X 3/4	
TOOLS:	Carpenter's Square Pencil	

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Square ends of board; on one side place mark on edge of board.	. SC-2-9
2. Mark both ends, using the marked edge to work from.	



METHOD OF EVALUATION:

Are lines square to marked edge?

JOB: Remove Wood with Chisel

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Wood Block, 4 X 3/4 X 10

TOOLS: Claw Hammer
Pencil
Rule
Tri-Square

JOB SHEET
IDENTIFICATION CODE

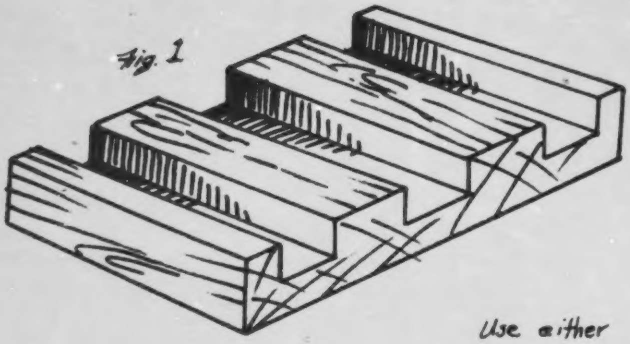
JOB NUMBER: J-2-10

SAFETY PRECAUTIONS:

Be sure to protect fingers from cutting edge of chisels.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out block according to drawing.	. SC-2-9
2. Remove wood from between lines.	. SC-2-10

Fig. 1



Use either Figure 1. or Figure 2.

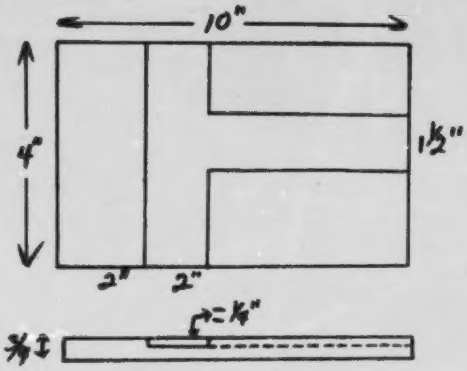


Fig. 2.

METHOD OF EVALUATION:

1. Was layout work done accurately to dimensions of drawing?
2. Are sides of rabbit smooth?
3. Is depth even?

JOB: Square Ends on Board

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Piece of Wood, 4 X 10 X 3/4

TOOLS: Tri-Square
Pencil

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-11

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place lines on ends of board.	. SC-2-11

METHOD OF EVALUATION:

Were ends cut square, both directions?

JOB:	Cut Off End of Board	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-12
COURSE:	Painting and Decorating	
MATERIAL:	Piece of Wood, 4 X 24 X 3/4	
TOOLS:	Pencil Tri-Square 10 Point Hand Saw	

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mark edge of board.	
2. Square ends from marked edge.	. SC-2-11
3. Cut ends to line.	. SC-2-12

METHOD OF EVALUATION:

Were ends cut square?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-13

JOB: Rip Cut Edge of Board

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Piece of Wood, 4 X 12 X 3/4

TOOLS:
6.5 Point Hand Saw
Rule
Combination Square
Pencil

SAFETY PRECAUTIONS:

Be careful not to cut fingers when starting cut.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out line with grain 1/2" from edge.	
2. Cut along line following line (leave 1/2 of line on wood).	. SC-2-12

METHOD OF EVALUATION:

1. Was line followed when cutting with rip saw?
2. Is cut square to surface?

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-14

JOB: Lay Out and Drill Hole

UNIT II: Small Tools

COURSE: Painting and Decorating

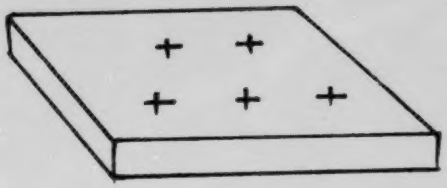
MATERIAL: Blocks of Wood

TOOLS: 1/4" Speed Bit
Electric Drill
Rule
Extension Cord

SAFETY PRECAUTIONS:

1. Check cord for breaks.
2. Clamp piece being drilled so it won't spin if drill bit sticks.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out several places on block to drill holes.	
2. Drill holes, keep drill bit at 90° to surface.	. SC-2-13



NOTE: Stock should be backed with scrap wood.

METHOD OF EVALUATION:

1. Was layout work done according to dimensions on drawing?
2. Were holes drilled at 90° to surface?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-15

JOB: Drill Hole Using an Automatic Push Drill

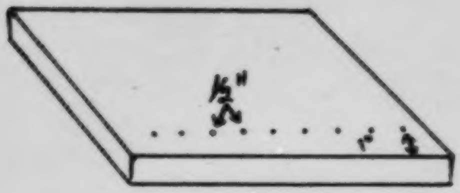
UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Blocks of Wood

TOOLS: Rule
Automatic Push Drill

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out holes 1" from edge and 1/2" apart.	
2. Drill holes.	. SC-2-14



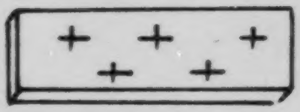
METHOD OF EVALUATION:

Was automatic push drill used properly?

JOB:	Countersink Holes	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-16
COURSE:	Painting and Decorating	
MATERIAL:	2 Pieces Wood	
TOOLS:	Rule Electric Drill 1/4" Drill Bit	Counter Sink Hand Brace

SAFETY PRECAUTIONS:

Check electric cords for breaks.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out several holes.	
2. Drill holes with electric drill.	
3. Countersink holes with hand brace.	. SC-2-15

METHOD OF EVALUATION:

Were holes countersunk to approximately the same diameter and depth?

JOB: Drill a 2 1/4" Hole

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 2 Wood Blocks

TOOLS: Brace
Expansion Bit

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-17

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out center.	
2. Drill a hole 2 1/4" in diameter.	. SC-2-16

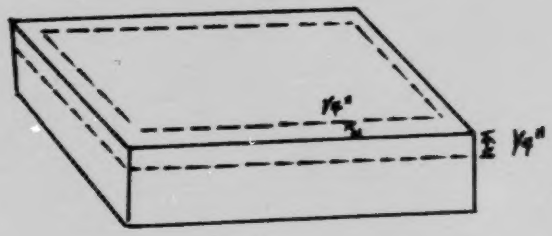
METHOD OF EVALUATION:

1. Is hole 90° to surface?
2. Is hole 2 1/4" in diameter?

JOB: Chamfer Edges
UNIT II: Small Tools
COURSE: Painting and Decorating
MATERIAL: Block of Wood, 4 X 10 X 3/4
TOOLS: Square
Handsaws--10 Point and 6.5 Point
Block Plane

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-18

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Square ends.	
2. Cut off ends to lines.	
3. Check other long side so it is square to the ends.	
4. Lay out 1/4 chamfer around stock.	
5. Use plane to chamfer edges.	. SC-2-17
6. Use plane to smooth edges.	. SC-2-17A
	NOTE: Always lay plane on its side.

METHOD OF EVALUATION:

1. Was layout work done accurately?
2. Are edges smooth and even?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-19

JOB: Plane with Grain
UNIT II: Small Tools
COURSE: Painting and Decorating
MATERIAL: Block of Wood
EQUIPMENT: Smooth Plane

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Plane end grain.	. SC-2-18
2. Plane the face of the block.	. SC-2-18A

METHOD OF EVALUATION:

Were edges split off by planning clean across?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-20

JOB: Drive Screws

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Wood Block, 2 X 4 X 10
6--1 X 3/4 Countersunk Wood Screws (Standard and Phillips Head)

TOOLS: Flat Screwdriver
Electric Drill
Brace
Countersink Bit
Pilot Bit

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out 6 holes 3/4" apart in straight line.	
2. Drill holes.	
3. Countersink holes.	
4. Drive wood screws.	
5. Remove screws.	. SC-2-19, SC-2-19A, SC-2-20
6. Repeat steps 1 thru 5.	NOTE: Proper size blades should be used.

METHOD OF EVALUATION:

1. Are all holes 3/4" apart on center?
2. Were all holes countersunk properly?
3. Are all screw heads 1/16-3/32" below surface?

JOB: Drive Wood Screws with Spiral Screwdriver

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Wood Blocks, 6" X 8" X 3/4"

TOOLS: Spiral Screwdriver
Countersink Bit
Brace

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-21

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out 6 holes 1" apart along center of block.	
2. Drill pilot holes with spiral drill.	
3. Countersink.	
4. Drive screws.	. SC-2-21

METHOD OF EVALUATION:

1. Was spiral screwdriver held on screw and used properly?
2. Were screws driven tight?

JOB: Sharpen Cabinet Scraper

UNIT II: Small Tools

COURSE: Painting and Decorating

TOOLS: Flat Scraper File
Cabinet Scraper

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-22

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Sharpen cabinet scraper.	. SC-2-22

METHOD OF EVALUATION:

1. Does scraper have proper burr?
2. Does scraper cut properly?

JOB: Remove Runs or Scratches in Finish with Cabinet Scraper

JOB SHEET IDENTIFICATION CODE

UNIT II: Small Tools

JOB NUMBER: J-2-23

COURSE: Painting and Decorating

MATERIAL: Wood Panel with Imperfection

TOOLS: Scraper File
Cabinet Scraper

SAFETY PRECAUTIONS:

Caution should be taken to protect hands and fingers.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Sharpen cabinet scraper.	
2. Remove scratch.	. SC-2-22, SC-2-23

METHOD OF EVALUATION:

Were scratches removed properly?

JOB: Sharpen Hook Blade Scraper

UNIT II: Small Tools

COURSE: Painting and Decorating

TOOLS: Hook Blade Scraper
Scraper File

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-24

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Sharpen hook blade scraper.	. SC-2-24

METHOD OF EVALUATION:

Is hook blade scraper sharp: Will it peel fingernail?

JOB: Remove Scratches with Hook Blade Scraper

JOB SHEET IDENTIFICATION CODE

UNIT II: Small Tools

JOB NUMBER: J-2-25

COURSE: Painting and Decorating

MATERIAL: Wood Block

TOOLS: Scraper File
Hook Blade Scraper

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Sharpen scraper.	. SC-2-24
2. Remove scratches.	. SC-2-25

METHOD OF EVALUATION:

Was scratch removed properly, no scraper marks or gouges caused by scraper?

JOB: Cut Metal Stock

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Metal Stock

TOOLS: Rule
Hack Saw
Scriber

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-26

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Measure stock for length, square with stock.	. SC-2-26
2. Cut stock with hack saw.	

METHOD OF EVALUATION:

1. Was saw used properly?
2. Is cut square?

JOB: Lay Out 4" Radius

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Piece of Wood, 4" X 10" X 3/4"

TOOLS: 6" Dividers
Tri-Square
Rule

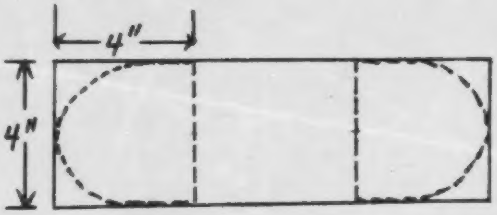
JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-27

SAFETY PRECAUTIONS:

Protect yourself and objects from sharp points.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out radii on ends of stock so each radius touches two sides and one end.	
2. Use dividers to swing arc.	. SC-2-27



METHOD OF EVALUATION:

Are radii laid out on stock properly?

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JOB:	Cut Radius	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-28
COURSE:	Painting and Decorating	
MATERIAL:	Wood Block, 4" x 10" X 3/4"	
TOOLS:	Compass Saw	

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cut radius as laid out in last job.	. SC-2-28

METHOD OF EVALUATION:

1. Was compass saw used properly?
2. Is cut square to surface?

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JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-29

JOB: Clamp Wood

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Two 1" X 1" X 4" Pieces of Wood

TOOLS: Two Hand Spring Clamps

SAFETY PRECAUTIONS:

Use pads under clamps to distribute force and protect surface.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Use spring clamp to hold wood strips together.	
2. Check to see if wood pieces clamp tight.	. SC-2-29

METHOD OF EVALUATION:

Are clamps set in position so as to distribute force evenly?

JOB: Glue Wood Stock

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-30

UNIT II: Small Tools

COURSE: Painting and Decorating

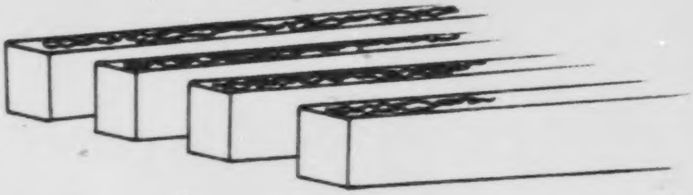
MATERIAL: 2 Pieces--1" X 1" X 4" Wood Stock

TOOLS: White Glue
Spring Clamps

SAFETY PRECAUTIONS:

Do not wipe glue from joints, scrape after glue is dry.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Spread glue on edge of wood stock.	. SC-2-30
2. Clamp stock with spring clamps.	. SC-2-29



METHOD OF EVALUATION:

Is glue creeping out along glue joint?

JOB: Clamp Stock to Table
UNIT II: Small Tools
COURSE: Painting and Decorating
MATERIAL: Wood Block, 4" X 10" X 3/4"
TOOLS: C-Clamp

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-31

SAFETY PRECAUTIONS:

Do not use force to tighten.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place block on work bench.	
2. Clamp block on bench for work.	. SC-2-31

METHOD OF EVALUATION:

1. Is material held securely?
2. Was face pad used to prevent damage to the material being clamped?

JOB:	Glue Up Wood Stock	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-32
COURSE:	Painting and Decorating	
MATERIAL:	6 Wood Pieces--2" X 10" X 3/4" White Glue	
TOOLS:	2 Bar Clamps	

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Select best side of each piece and mark with an X.	
2. Spread glue on one edge of each piece.	
3. Clamp pieces together.	. SC-2-32 NOTE: Be sure all marked sides are up or down.

METHOD OF EVALUATION:

1. Were pieces marked for best side?
2. Are all like surfaces on one side?
3. Did glue creep from joint?
4. Were clamp pads used?
5. Were slats kept even on one side?

JOB: Glue Broken Wooden Rod

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 3/4" X 3/4" X 16" Wood Rod

TOOLS: Jergensen Clamps

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-33

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Break 3/4" X 3/4" rod in two pieces.	
2. Spread glue.	. SC-2-30
3. Clamp with jergensen clamp.	. SC-2-33

METHOD OF EVALUATION:

Is split glued tight?

JOB: Remove Foreign Material from Edge of Metal

JOB SHEET IDENTIFICATION CODE

UNIT II: Small Tools

JOB NUMBER: J-2-34

COURSE: Painting and Decorating

MATERIAL: Scrap Metal from Welding Shop

TOOLS: Electric Grinder

SAFETY PRECAUTIONS:

Wear gloves and face mask.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Clamp metal to work bench.	
2. Grind all surfaces and edges smooth.	. SC-2-34

METHOD OF EVALUATION:

1. Were all safety precautions followed?
2. Were all burrs and scales removed?

JOB: Remove Dents and Smooth Surface with a Belt Sander

JOB SHEET IDENTIFICATION CODE

UNIT II: Small Tools

JOB NUMBER: J-2-35

COURSE: Painting and Decorating

MATERIAL: Wood Block 10" X 12", Glued Up From Previous Job

TOOLS:
Hook Blade Scraper
Scraper File
Belt Sander
80 and 120 Belts

SAFETY PRECAUTIONS:

Check electric cord for defects.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove excess glue.	
2. Sand surface with 80 and then 120 grit belts.	. SC-2-35

METHOD OF EVALUATION:

1. Was surface sanded smooth, free of edge marks?
2. Were edges square (not rounded by belt sander going over edge)?

JOB: Remove Imperfections on Wood Surface

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-36

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 10" X 12" X 3/4" Wood Panel from Previous Job

TOOLS: Oscillating Sander
120-C, 150-C Abrasive Paper

SAFETY PRECAUTIONS:

Do not bear down on sander, 5-8 lbs. is enough.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove mill and belt sanding marks from panel with 120-C paper on sander.	. SC-2-36
2. Sand with 150-C paper on sander.	
3. Finish sanding by hand 220A.	

METHOD OF EVALUATION:

1. Was sanded area beveled or (blended) into surrounding area?
2. Was all belt sanding removed in the hand sanding?

JOB: Hold and Tighten Nuts and Bolts With Pliers and Screwdriver

JOB SHEET
IDENTIFICATION CODE

UNIT II: Small Tools

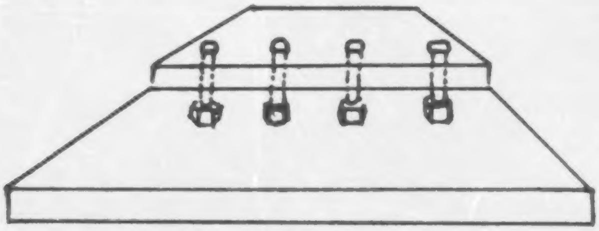
JOB NUMBER: J-2-37

COURSE: Painting and Decorating

MATERIAL: Stove Bolts
2 Pieces 1/4" Plywood

TOOLS: Slip Jaw Pliers
Flat Screwdriver

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Drill several holes through plywood.	
2. Place bolts and tighten nuts.	. SC-2-37



METHOD OF EVALUATION:

1. Were tools used properly?
2. Were bolts and nuts tight?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-38

JOB: Cut Compound Mitre with Hand Saw

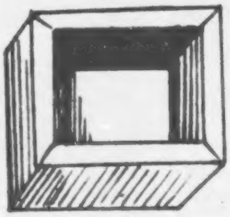
UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 1 Piece 1" X 4", 2' Long

TOOLS: Combination Square
10 Point Hand Saw
Pencil
Mitre Clamp

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out and cut the biggest square frame possible from stock supplied.	
2. Cut pieces to desired length and mitre.	. SC-2-38
3. Use mitre clamp to hold together.	. SC-2-39
4. Glue and nail together.	



METHOD OF EVALUATION:

1. Was material laid out to conserve material?
2. Are all mitered corners tight?
3. Was mitre clamp used properly?
4. Were nails set properly?

JOB: Set Up Tubular Scaffold
UNIT II: Small Tools
COURSE: Painting and Decorating
EQUIPMENT: 4 Ends
4 Cross Braces
4 Pins
2 Planks Length to Fit

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-39

SAFETY PRECAUTIONS:

OSHA safety regulations on scaffolding

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up tubular scaffold 2 bucks high.	. SC-2-40
2. Tear down.	

METHOD OF EVALUATION:

1. Was scaffold leveled properly?
2. Were proper procedures used in erecting scaffolding?

JOB: Set Up and Use Rolling Scaffold

UNIT II: Small Tools

COURSE: Painting and Decorating

EQUIPMENT: Rolling Scaffolding

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-40

SAFETY PRECAUTIONS:

When working on scaffolds follow OSHA safety requirements.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up and mount rolling scaffold.	. SC-2-41
2. Adjust legs to uneven surfaces.	

METHOD OF EVALUATION:

1. Was proper setup procedure followed?
2. Were proper mount and dismount procedures followed?

JOB: Shake Paint

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Paint

EQUIPMENT: Paint Shaker

SAFETY PRECAUTIONS:

1. Be sure lids are tight
2. Only shake full can
3. Never leave immediate area

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-41

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Shake paint.	. SC-2-42

METHOD OF EVALUATION:

Were proper procedures followed?

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JOB:	Use Jiffy Mixer	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-42
COURSE:	Painting and Decorating	
MATERIAL:	Paint	
EQUIPMENT:	Electric Drill	
TOOLS:	Extension Cord Jiffy Mixer Screwdriver	

SAFETY PRECAUTIONS:

Do not remove jiffy mixer from material in bucket until all movement has stopped.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mix paint with jiffy mixer.	. SC-2-43

METHOD OF EVALUATION:

1. Were drill and mixer inspected before used?
2. Was material thoroughly mixed?

JOB: Snap a Line

UNIT II: Small Tools

COURSE: Painting and Decorating

TOOLS: 6' Rule
Chalk Line

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-43

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Snap a line between two points.	. SC-2-44

METHOD OF EVALUATION:

Was line straight and easy to see?

JOB: Cut Materials with Utility Knife

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Craft Paper

TOOLS: Utility Knife
Carpenter's Square

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-44

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cut strips 1/2" wide using square as straightedge.	. SC-2-45

METHOD OF EVALUATION:

Strips are cleanly cut and even.

JOB: Cut Drywall

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: 4' X 4' Pieces of Drywall

TOOLS: 6' Folding Rule
Building Knife

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-45

SAFETY PRECAUTIONS:

Caution should be used to protect fingers from knife.

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mark a line 3" from edge using rule and pencil.	. SC-2-46
2. Cut along line.	
3. Break over edge of table.	
4. Cut from back with building knife.	
5. Cut 3 strips.	

METHOD OF EVALUATION:

All three strips of drywall should be the same width.

JOB:	Use Plumb Bob	JOB SHEET IDENTIFICATION CODE
UNIT II:	Small Tools	JOB NUMBER: J-2-46
COURSE:	Painting and Decorating	
MATERIAL:	Nails	
TOOLS:	Plumb Bob Chalk Line Claw Hammer	

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place small nail close to ceiling.	
2. Hang line on nail so as to form a vertical line down the wall.	. SC-2-47
3. Mark wall behind line.	
4. Snap line.	

METHOD OF EVALUATION:

Was line plumb?

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JOB: Use Razor Scraper

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Window Sash with Paint on Glass

TOOLS: Razor Scraper

SAFETY PRECAUTIONS:

Protect fingers from cutting edge

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-2-47

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove paint from glass.	. SC-2-48

METHOD OF EVALUATION:

1. Was all paint removed?
2. Was wood or glazing damaged?

JOB: Paint Pipe

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Paint
Pipe

EQUIPMENT: Paint Mitt

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-48

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Paint pipe.	. SC-2-49

METHOD OF EVALUATION:

1. Was paint mitt used correctly?
2. Was paint applied evenly and smoothly?

JOB: Use Roller Ramp

UNIT II: Small Tools

COURSE: Painting and Decorating

MATERIAL: Paint

EQUIPMENT: 5 Gallon Bucket

TOOLS: Roller Ramp

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-2-49

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Roll wall area.	. SC-2-50

METHOD OF EVALUATION:

Was roller loaded properly?

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-3-1

JOB: Fold and Cut Sandpaper For Two Sanding Pads

UNIT III: Finishing

COURSE: Painting and Decoration

MATERIAL: 8" x 11" Sheet Sandpaper

TOOLS: Putty Knife

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING
1. Fold and cut a sheet of sandpaper to form two sanding pads.	. SC-3-1 . IL-3-1

METHOD OF EVALUATION:

Was sandpaper folded and cut properly to produce two sanding pads with three sanding surfaces?

JOB SHEET
IDENTIFICATION CODE

JOB: Fold and Cut Sandpaper For Three Sanding Pads

UNIT III: Finishing

JOB NUMBER: J-3-2

COURSE: Painting and Decorating

MATERIAL: 8" x 11" Sheet Sandpaper

TOOLS: Putty Knife

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fold and cut a sheet of sandpaper to form three sanding pads.	. SC-3-2

METHOD OF EVALUATION:

Was sandpaper folded and cut properly to produce three sanding pads with three sanding surfaces?

JOB SHEET IDENTIFICATION CODE

JOB: Sand Wood Panel with Coarse Grade Sandpaper

UNIT III: Finishing

JOB NUMBER: J-3-3

COURSE: Painting and Decorating

MATERIAL: Wood Panel 6" x 12"
8" x 11" Sheet Sandpaper (Coarse Grade, 80-120)

TOOLS: Putty Knife

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fold and cut sandpaper into two sanding pads.	. SC-3-1 thru SC-3-3
2. Remove large grit from sandpaper.	
3. Sand the wood panel.	

METHOD OF EVALUATION:

1. Was sandpaper cut and folded into two sanding pads?
2. Was large grit removed from abrasive paper?
3. Was the surface sanded parallel to the grain?

JOB: Sand Wood Panel with Medium Grade Sandpaper

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-4

COURSE: Painting and Decorating

MATERIAL: Wood Panel from J-1-3
8" x 11" Sheet Sandpaper (Medium Grade, 120-180)

TOOLS: Putty Knife

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fold and cut sandpaper into three sanding pads.	. SC-3-1 thru SC-3-3
2. Remove large grit from sandpaper.	
3. Sand the wood panel.	

METHOD OF EVALUATION:

1. Was sandpaper folded and cut into three sanding pads?
2. Was the surface sanded parallel to the grain?

JOB: Sand Wood Panel with Fine Grade Sandpaper

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-5

COURSE: Painting and Decorating

MATERIAL: Wood Panel from J-1-3
8" x 11" Sheet Sandpaper (Fine Grade, 180-240)

TOOLS: Putty Knife

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fold and cut sandpaper.	. SC-3-1 thru SC-3-3
2. Remove large grit from sandpaper.	
3. Sand the wood panel.	

METHOD OF EVALUATION:

Was the surface sanded parallel to the grain of the wood?

JOB: Open Material Container

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-6

COURSE: Painting and Decorating

MATERIAL: Quart or Gallon Container of Paint

EQUIPMENT: Drop Cloth

TOOLS: Screwdriver

SAFETY PRECAUTIONS:

Wear safety glasses

	COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING
1.	Cover work area.	. SC-3-6
2.	Open the container of paint.	. SC-3-7

METHOD OF EVALUATION:

Was the lip of the container damaged?

JOB: Hand Mix Container of Paint

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-7

COURSE: Painting and Decorating

MATERIALS: Quart or Gallon Container of Paint

EQUIPMENT: Drop Cloth

TOOLS: Stirring Paddle
Screwdriver

SAFETY PRECAUTIONS:

Wear safety glasses

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING
1. Cover work area.	. SC-3-6 thru SC-3-8
2. Open container of paint.	
3. Stir and mix container of paint.	

METHOD OF EVALUATION:

1. Were all contents of the container "boxed"?
2. Was the paint thoroughly mixed?

JOB: Apply Stain with a Cloth

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-8

COURSE: Painting and Decorating

MATERIAL: Wood Panel from J-3-3
Container of Wood Stain

EQUIPMENT: Drop Cloth
Piece of Flannel or Cotton Cloth

TOOLS: Stirring Paddle
Screwdriver

SAFETY PRECAUTIONS:

1. Wear safety glasses
2. Disposal of oily cloths

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover work area.	. SC-3-6 thru SC-3-10
2. Open container of stain.	
3. Stir and mix container of stain.	
4. Apply the stain to the panel with a cloth.	

METHOD OF EVALUATION:

1. Was the stain thoroughly mixed?
2. Was the stain applied uniformly to the panel?

JOB: Hold a Paint Brush

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-9

COURSE: Painting and Decorating

TOOLS: #8 Round Sash Brush or 3/4" Fitch
#8 Oval Paint Brush
3" Flat Paint Brush

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Practice holding various shaped brushes in the correct procedure to "cut-in", and paint vertical and horizontal surfaces.	. SC-3-11 . IL-3-2

METHOD OF EVALUATION:

Was the brush held properly for the style of brush and the surface to be painted?

JOB: Bridle a Paint Brush

JOB SHEET
IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-10

COURSE: Painting and Decorating

MATERIALS: (2) 6-oz. Tacks
Cord

TOOLS: #8 Oval Paint or #10 Round Sash Brush
Utility Knife
Tack Hammer

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Bridle a paint brush.	. SC-3-12 . IL-3-3

METHOD OF EVALUATION:

1. Were the tacks positioned properly?
2. Are any strands of cord overlapped?
3. Are any bristles protruding through the strands of cord?
4. Are the loops located directly below the tacks?
5. Was the brush bridled or wrapped too tightly?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-11

JOB: Load a Paint Brush

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Container of Latex Paint

EQUIPMENT: Drop Cloth
Clean Pail

TOOLS: Stirring Paddle
3"Flat Paint Brush
Screwdriver

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING
1. Practice loading a paint brush.	. SC-3-13
2. Clean the paint brush with water.	. SC-3-14
	. IL-3-4

METHOD OF EVALUATION:

1. Was the brush dipped into the paint too deeply?
2. Was the excess paint removed by tapping the brush on the sides of the pail?
3. Was the brush cleaned properly?

JOB: Varnish Wood Panel

JOB SHEET
IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-12

COURSE: Painting and Decorating

MATERIALS: Alkyd or Polyurethane Varnish
Wood Panel from J-3-3
Mineral Spirits

EQUIPMENT: Drop Cloth
Cheesecloth (for straining paint)
Clean Pail

TOOLS: 2 1/2" Flat Varnish Brush
Stirring Paddle
Screwdriver

SAFETY PRECAUTIONS:

Wear safety glasses with side shields.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Strain the varnish.	. SC-3-9
2. Load the brush with varnish.	. SC-3-13
3. Apply the varnish to the wood panel.	. SC-3-16
4. Clean the brush with mineral spirits.	. SC-3-14
	. IL-3-5

METHOD OF EVALUATION:

1. Was the varnish strained?
2. Was the varnish applied uniformly to the panel?
3. Was the brush cleaned properly?

JOB: Recoat the Wood Panel with Varnish

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-13

COURSE: Painting and Decorating

MATERIAL: Fine Sandpaper
Alkyd or Polyurethane Varnish
Mineral Spirits
Wood Panel from J-3-3

EQUIPMENT: Drop Cloth
Cheese Cloth
Clean Pail
Tack Cloth

TOOLS: Screwdriver
Stirring Paddle
2 1/2" Varnish Brush

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Strain the varnish.	. SC-3-9
2. Sand the surface.	
3. Dust the surface.	
4. Load the brush with varnish.	. SC-3-13
5. Apply the varnish to the wood panel.	. SC-3-16 and IL-3-6
6. Clean the brush with mineral spirits.	. SC-3-14

METHOD OF EVALUATION:

1. Was surface sanded uniformly without surface scratches?
2. Was the surface dusted or wiped to remove all foreign material?
3. Was the varnish applied uniformly and free of brush marks?

JOB:	Repair Nail Holes or Surface Imperfections	JOB SHEET IDENTIFICATION CODE
UNIT III:	Finishing	JOB NUMBER: J-3-14
COURSE:	Painting and Decorating	
MATERIALS:	Colored Putty Wood Panel from J-3-3	
TOOLS:	Putty Knife	

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mix colored putty.	. SC-3-17
2. Putty nail holes.	. SC-3-18
	. SC-3-19

METHOD OF EVALUATION:

1. Was the putty colored to match the color of the wood?
2. Were nail holes, etc., completely filled with the surface slightly convex?

JOB: Recoat the Wood Panel with Varnish

JOB SHEET
IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-15

COURSE: Painting and Decorating

MATERIAL:
Fine Sandpaper
Alkyd or Polyurethane Varnish
Mineral Spirits
Wood Panel from J-3-3

EQUIPMENT:
Drop Cloth
Cheese Cloth
Clean Pail
Tack Cloth

TOOLS:
Screwdriver
Stirring Paddle
2 1/2" Varnish Brush

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The students will be able to:	TEACHING/LEARNING ACTIVITIES
1. Strain the varnish.	. SC-3-9
2. Sand the surface.	
3. Dust the surface.	
4. Load the brush with varnish.	. SC-3-13
5. Apply the varnish to the wood panel.	. SC-3-16
6. Clean the brush with mineral spirits.	. SC-3-14

METHOD OF EVALUATION:

1. Was the varnish strained?
2. Was the surface sanded or rubbed down properly?
3. Was the varnish applied uniformly and free of brush marks?
4. Was the brush cleaned thoroughly?

JOB SHEET IDENTIFICATION CODE

JOB: Remove Coating from Panel with Paint Remover

UNIT III: Finishing

JOB NUMBER: J-3-16

COURSE: Painting and Decorating

MATERIAL:
Paint Remover
Steel Wool (Medium Grade)
Panel from J-3-3

TOOLS:
Putty Knife
2" Flat Paint Brush

SAFETY PRECAUTIONS:

1. Wear safety glasses with side shields
2. Wear rubber gloves

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Apply the paint remover to the coated panel.	
2. Scrape the softened coating from the panel.	. SC-3-20
3. Clean the surface with paint remover and steel wool.	. SC-3-21

METHOD OF EVALUATION:

1. Was the remover applied uniformly without excessive brushing?
2. Was the surface cleanly scraped?
3. Is the surface free of scraper scratches and gouges?
4. Was the remaining surface film cleanly removed with remover and steel wool?
5. Were all safety practices and precautions followed?

JOB: Paint Panel with Pigmented Coating

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-17

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Interior Pigmented Coating and Approporiated Solvent
Panel from J-3-3
Sandpaper (Medium Grade)

EQUIPMENT: Clean Pail

TOOLS: 2" Flat Paint Brush

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Sand the surface.	
2. Coat the panel with two or three coats of pigmented paint.	. IL-3-6
3. Clean the paint brush.	

METHOD OF EVALUATION:

1. Was the surface properly sanded?
2. Was the paint properly prepared for application?
3. Were the proper procedures and techniques followed in applying the pigmented coating?

JOB: Paint Panel Door

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-18

COURSE: Painting and Decorating

MATERIAL: Sandpaper
Paint and Appropriate Solvent
Panel Door

TOOLS: Paint Brushes
Dust Brush

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover the work area.	
2. Sand the surface.	
3. Dust the surface.	
4. Strain the paint.	
5. Apply the paint to the panel door.	. IL-3-7
6. Clean the paint brushes.	

METHOD OF EVALUATION:

1. Were all flat and molded surfaces sanded without rounding any square edges?
2. Was the correct procedure followed for painting a panel door?
3. Were the panel and molded surfaces free of runs and sags?

JOB: Remove Paint from a Painted Panel Using Hand Scrapers

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-19

COURSE: Painting and Decorating

MATERIAL: Panel from J-2-3
Sandpaper

TOOLS: Hooked Hand Scraper
Flat Scraper File

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Sharpen the blade of the hooked scraper.	. SC-2-24
2. Scrape the coating from the surface using a hooked scraper.	. SC-2-25
3. Sand the surface.	

METHOD OF EVALUATION:

1. Was the correct procedure followed when sharpening the scraper blade?
2. Was the proper angle filed on the blade?
3. Is the surface free of scraper scratches and gouges?
4. Was the surface cleanly scraped?

JOB: Recoat with Pigmented Coating

JOB SHEET
IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-20

COURSE: Painting and Decorating

MATERIAL: Panel from J-3-3
Patching Material
Paint and Appropriate Solvent

EQUIPMENT: Drop Cloth
Cheese Cloth

TOOLS: Paint Brush
Putty Knife
Screwdriver
Stirring Paddle

SAFETY PRECAUTIONS:

Wear safety glasses

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Smooth sand the surface.	
2. Patch the scratched or gouged surface.	
3. Paint the surface with a pigmented coating.	
4. Clean the paint brush.	

METHOD OF EVALUATION:

Were the surface scratches or gouges smoothed with spackle?

JOB: Paint a Louvre Door or Shutter

JOB SHEET
IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-21

COURSE: Painting and Decorating

MATERIAL: Louvre Door or Shutter
Paint and Appropriate Solvent
Sandpaper

EQUIPMENT: Drop Cloth
Cheese Cloth

TOOLS: Screwdriver
Putty Knife
Paint Brushes
Stirring Paddle
Dust Brush

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover work area.	
2. Sand the surface.	
3. Paint the louvre door with a pigmented coating.	
4. Clean the paint brushes.	

METHOD OF EVALUATION:

1. Were all flat and louvred surfaces sanded?
2. Were all surfaces completely covered with paint?
3. Was the correct procedure followed for painting a louvre door?
4. Is the surface free of runs and sags?

JOB: Practice "Cutting-In" to a Line on a Flat Surface

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-22

COURSE: Painting and Decorating

MATERIAL: Panel with Moldings or Lines Drawn on the Surface
Paint and Appropriate Solvent

EQUIPMENT: Drop Cloth

TOOLS: Various Types and Sizes of Paint Brushes
Screwdriver

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Practice "cutting-in" straight lines to moldings or lines on the practice panel.	

METHOD OF EVALUATION:

1. Was the proper technique followed in holding a brush and applying paint to cut in edges?
2. Degree of accuracy in cutting in.

JOB: Paint Louvres on Louvred Door with a Contrasting Color

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-23

COURSE: Painting and Decorating

MATERIAL: Louvre Door or Shutter from J-3-21
Paint and Appropriate Solvent

EQUIPMENT: Drop Cloth
Cheese Cloth

TOOLS: Screwdriver
Putty Knive
Paint Brushes
Stirring Paddle
Dust Brush

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover the work area.	
2. Sand the surface.	
3. Paint the louvres a contrasting color to the door styles.	
4. Clean the paint brushes.	

METHOD OF EVALUATION:

Was the contrasting color cut in clean and straight?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-24

JOB: Practice Cutting Glass to Size

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Glass
Lubricant

TOOLS: Carpenter's Square
Foot Rule
Glass Cutter

SAFETY PRECAUTIONS:

1. Wear safety glasses with side shields
2. Clean small fragments of glass from thw work area when the job is completed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Measure and mark the size of glass to be cut.	
2. Cut the glass to size.	. SC-3-24
3. Place pieces and chips of glass in the proper disposal container.	

METHOD OF EVALUATION:

1. Was the size of the glass to be cut measured and marked accurately?
2. Was the glass cut accurately to size?
3. Were the cut edges cleanly snapped or broken?
4. Was the cutting wheel lubricated?
5. Were all safety practices observed?

JOB: Practice Bedding Glass and Installing Glazing Points

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-25

COURSE: Painting and Decorating

MATERIAL: Window Sash
Glass
Glazing Points (Push Points)
Glazing Compound

TOOLS: Putty Knife

SAFETY PRECAUTIONS:

Wear safety glasses with side shields

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Apply the bedding glaze.	. SC-3-25
2. Bed the glass in the bedding glaze.	
3. Install the glazing points.	. SC-3-26

METHOD OF EVALUATION:

1. Was the proper amount of bedding glaze applied?
2. Was the glass properly and uniformly bedded in the bedding glaze?
3. Were the correct number of glazing points used?
4. Were the glazing points set properly?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-26

JOB: Practice Glazing Glass

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Window Sash with Glazing Removed
Glazing Compound

TOOLS: Putty Knife

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove all old glazing from the rabbet.	
2. Practice glazing the glass.	. SC-3-27

METHOD OF EVALUATION:

1. Was the rabbet cleaned of all old glazing?
2. Was the glazing angled correctly?
3. Were the corners angled neatly and cleanly?
4. Is the glazing free of voids?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-27

JOB: Replace Glass in Window Sash

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL:
- Window Sash
- Glazing Compound
- Glass

TOOLS:
- Carpenter's Square
- Glass Cutter
- Putty Knife
- Foot Rule

SAFETY PRECAUTIONS:

1. Wear safety glasses with side shields
2. Wear rubber gloves when removing broken glass

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove the broken glass from the window sash.	. SC-3-28
2. Remove all old glazing from the rabbet.	
3. Cut the glass.	. SC-3-24
4. Apply the bedding glaze.	. SC-3-25
5. Bed the glass.	
6. Install glazing points.	. SC-3-26
7. Glaze the glass.	. SC-3-27

METHOD OF EVALUATION:

1. Was the rabbet cleaned thoroughly?
2. Was the glass cut accurately and neatly?
3. Was the glass bedded correctly?
4. Were the correct number of glazing points installed?
5. Was the glass glazed neatly and at the correct angle?
6. Was the excess bedding glaze trimmed from the inside of the sash?
7. Were safety precautions observed?

JOB: Practice Setting Up a Step Ladder

JOB SHEET
IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-28

COURSE: Painting and Decorating

EQUIPMENT: 2 Step Ladders
Wooden Extension Plank

SAFETY PRECAUTIONS:

Follow all OSHA regulations governing ladders and scaffolding

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up step ladders at approximately a 6' span.	. SC-3-29
2. Extend the extension plank between the ladders.	

METHOD OF EVALUATION:

1. Were the ladders set up and positioned properly?
2. Does the plank have the correct bearing on the steps of the ladder?

JOB: Paint a Window Sash and Frame Installed in a Mock Up

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-29

COURSE: Painting and Decorating

MATERIAL: Paint
Appropriate Solvent
Sandpaper

EQUIPMENT: Step Ladder
Extension Plank

TOOLS: Paint Brushes
Putty Knife
Dust Brush

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up the step ladder scaffold.	
2. Sand the window sash and frame.	
3. Paint the window sash and frame.	. IL-3-8 & IL-3-9
4. Clean the paint brushes.	

METHOD OF EVALUATION:

1. Was the scaffold set up correctly?
2. Was the scaffold set up at the proper working height?
3. Was the sash and frame sanded properly?
4. Was the correct window painting procedure followed?
5. Was the joint between the glass and the glazing sealed when cutting in the sash?
6. Was the sash cut in neatly?

JOB: Practice Applying Caulking Compound

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Cartridge of Caulking Compound
Vertical Siding Mock-Up

TOOLS: Caulking Gun

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-3-30

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Prepare the caulking tube for use.	. SC-3-30
2. Apply a bead of caulking to the vertical siding mock-up.	. SC-3-31

METHOD OF EVALUATION:

1. Was the caulking tube prepared properly?
    A. Angle cut
    B. Seal broken
    C. Correct size opening
2. Was the gun held at the correct angle?
3. Was the caulking bead applied uniformly and neatly?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-31

JOB: Practice Setting Up an Extension Ladder

UNIT III: Finishing

COURSE: Painting and Decorating

EQUIPMENT: Extension Ladder with Safety Feet

SAFETY PRECAUTIONS:

Follow all OSHA regulations governing ladders and scaffolding

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Practice setting up and positioning an extension ladder to an interior or exterior structure.	. SC-3-32 & SC-3-33 . IL-3-10

METHOD OF EVALUATION:

1. Was the proper procedure followed when setting up the ladder?
2. Was the ladder angled correctly to the structure?

JOB: Practice Moving an Extension Ladder

UNIT III: Finishing

COURSE: Painting and Decorating

EQUIPMENT: Extension Ladder with Safety Feet

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-3-32

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Practice carrying an extension ladder in an upright position.	. SC-3-34

METHOD OF EVALUATION:

Was the correct procedure followed in carrying a ladder in an upright position?

JOB: Practice Setting Up a Ladder Jack Scaffold

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-33

COURSE: Painting and Decorating

EQUIPMENT: 2 Extension Ladders
Extension Plank
1 pair Safety Ladder Jacks

SAFETY PRECAUTIONS:

Refer to OSHA regulations governing the use and limitations of a ladder jack scaffold

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up and position the extension ladders.	. SC-3-32
2. Attach the ladder jacks to the ladder.	. SC-3-33
3. Extend and carry the plank up the ladders and place on the ladder jacks.	. SC-3-35

METHOD OF EVALUATION:

1. Were the extension ladders positioned correctly?
2. Were ladder jacks attached to the ladders correctly?
3. Does the plank have the correct bearing on the ladder jacks?

JOB: Practice Working on a Ladder Jack Scaffold

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-34

COURSE: Painting and Decorating

MATERIAL:
2 Extension Ladders
Extension Plank
1 Pair Safety Ladder Jacks

SAFETY PRECAUTIONS:

Refer to OSHA regulations governing the use and limitations of a ladder jack scaffold

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up the ladder jack scaffold.	. SC-3-35
2. Practice mounting and working on the platform of the ladder jack scaffold.	. SC-3-36 . IL-3-11

METHOD OF EVALUATION:

1. Was the ladder jack scaffold set up and positioned properly?
2. Were proper procedures followed when mounting and working on a scaffold?

JOB: Paint the Window and Siding of a Two Floor Mock-Up

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-35

COURSE: Painting and Decorating

MATERIAL:
Paint and Appropriate Solvent
Sandpaper

EQUIPMENT:
2 Extension Ladders
Extension Plank
1 Pair Safety Ladder Jacks
Pot Hook
Clean Pail

TOOLS:
Paint Brushes
Putty Knife
Screwdriver
Stirring Paddle
Dust Brush

SAFETY PRECAUTIONS:

OSHA ladder jack scaffold

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up the ladder jack scaffold.	
2. Sand the window and siding.	. SC-3-32 thru SC-3-36
3. Support the paint pail to the ladder.	. SC-3-37
4. Paint the window and siding.	

METHOD OF EVALUATION:

1. Was the ladder jack scaffold set up and positioned properly?
2. Was the pot hook used and attached to the ladder correctly?
3. Was the siding and window painted neatly?

JOB: Remove Coating with Heat

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Painted Panel

EQUIPMENT: Propane Torch with Striker

TOOLS: Electric Paint Remover
Putty Knife

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-36

SAFETY PRECAUTIONS:

Observe all safety precautions when working with an open flame

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove paint from the panel using an electric paint remover.	. SC-3-38, IL-3-12 & IL-3-13
2. Scrape the softened coating from the panel.	
3. Light a propane torch.	. SC-3-39
4. Use the propane torch to soften the coating on the panel.	. SC-3-40
5. Scrape the softened coating from the panel.	

METHOD OF EVALUATION:

1. Was the coating removed cleanly without burning or scorching the wood surface?
2. Was the propane torch lit correctly and safely?
3. Was the heat removing equipment handled safely when using?
4. Is the surface free of scraper scratches and gouges?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-37

JOB: Remove Rust and Scale from Metal

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Piece of Rusted Metal
Sanding Discs

TOOLS: Disc Sander

SAFETY PRECAUTIONS:

Wear safety glasses with side shields or goggles

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove the rust from the metal by sanding the surface with a disc sander.	

METHOD OF EVALUATION:

1. Was all rust removed from the metal surface?
2. Was the disc sander held at the correct angle to the surface while sanding?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-38

JOB: Tape a Flat Wallboard Joint

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Mock Wall with Wallboard Joints
Powdered Joint Compound
Joint Tape

EQUIPMENT: Mud Pan

TOOLS: Broadknife or Smoothing Trowel
Shears

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Inspect the surface for loose or torn surface paper.	. IL-3-14
2. Mix joint compound.	. SC-3-41
3. Tape the flat wallboard joint.	. SC-3-42 NOTE: Allow 24 hours drying time.
4. Apply the top coat to the flat wallboard joint.	. SC-3-42 NOTE: Allow 24 hours drying time.
5. Apply the skim coat and finish the flat wallboard joint.	. SC-3-42
6. Wash the taping tools with water.	

METHOD OF EVALUATION:

1. Was loose surface paper removed?
2. Was the joint compound mixed to the proper consistency?
3. Was the proper thickness of bedding compound applied for taping?
4. Was the tape bedded in the compound properly?
5. Was excess compound removed from the surface?
6. Were edges "feathered out" neatly?
7. Was any loose tape observed?

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-3-39

JOB: Spot Wallboard Nails

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Mock Wall with Wallboard Joints
Powdered Joint Compound

EQUIPMENT: Mud Pan

TOOLS: Broadknife or Smoothing Trowel
Hammer

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Inspect the surface for loose, protruding or poorly nailed wallboard.	. IL-3-15
2. Mix joint compound.	. SC-3-41
3. Apply joint compound over the slightly depressed nails.	. SC-3-44 NOTE: Allow 24 hours drying time.
4. Apply second application of compound over nails.	. SC-3-44 NOTE: Allow 24 hours drying time.
5. Apply third application of compound to complete nail spotting.	. SC-3-44
6. Wash taping tools with water.	

METHOD OF EVALUATION:

1. Were all loose or poorly applied nails removed or re-set?
2. Were all recessed nails filled flush with the surface?
3. Was all excess compound removed from the surface?

JOB: Finish an Outside Corner

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Mock Wall with Outside Wallboard Corner
Joint Compound (Ready Mixed)

EQUIPMENT: Mud Pan

TOOLS: Broadknife or Smoothing Trowel

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-41

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Install metal corner bead.	
2. Prepare the ready mixed joint compound.	
3. Apply the first application of joint compound to metal bead.	. SC-3-45 NOTE: Allow 24 hours drying time.
4. Apply second coat of joint compound to the metal bead.	. SC-3-45 NOTE: Allow 24 hours drying time.
5. Apply the finish to the metal bead.	. SC-3-45
6. Wash the taping tools with water.	

METHOD OF EVALUATION:

1. Was the metal bead installed neat and straight?
2. Was the compound built up to the metal bead and feathered out uniformly and neatly?

JOB: Patch a Plastered Wall

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Section of Plastered Wall
Powdered Spackling Compound

EQUIPMENT: Mixing Pan

TOOLS: Triangular Trowel
Smoothing Trowel
Hammer
Putty Knife
Calcimine Brush or Old Worn Brush

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-42

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove all loose or defective plaster.	
2. Undercut all surface imperfections to be patched.	
3. Mix the powdered spackling compound.	
4. Thoroughly prewet all surfaces to be patched.	
5. Patch all surface imperfections.	. SC-3-46 & SC-3-47
6. Clean all tools with water.	

METHOD OF EVALUATION:

1. Was all defective plaster removed?
2. Were imperfections adequately undercut?
3. Was material mixed to proper consistency?
4. Was patch blended into surrounding surface?
5. Were tools properly cleaned for storage?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-43

JOB: Patch a Wall Surface with Paste Spackle

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Plastered or Wallboard Mock Up
Paste Spackle

TOOLS: Broad Knife
Smoothing Trowel
screwdriver

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Knife the wall surface with a broadknife.	. SC-3-48
2. Spackle minor surface imperfections with paste spackle and a broadknife.	. SC-3-46
3. Clean all tools with water.	

METHOD OF EVALUATION:

1. Was the surface knifed to removed all surface projections?
2. Were all surface imperfections filled and smoothed with spackle?

JOB: Mix and Match Paint to an Existing Color

JOB SHEET IDENTIFICATION CODE

UNIT III: Finishing

JOB NUMBER: J-3-44

COURSE: Painting and Decorating

MATERIAL: Latex Wall Paint
Tinting Colors (Universal)
Sample Chip of Color to be Matched

TOOLS: Screwdriver
Stirring Paddle
Paint Brush

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Open the container of paint.	
2. Add the tinting color to the container of paint.	
3. Thoroughly stir and mix the color through the paint.	
4. Brush a small amount of the paint onto a sealed surface and allow to dry.	
5. Compare the dried sample to sample color to be matched. (Compare the samples under natural and artificial lighting.)	
6. Add additional tinting color if necessary.	
7. Repeat steps 4 and 5 until desired color is achieved.	

METHOD OF EVALUATION:

How close was the color matched to the sample given?

JOB: Paint a Wall with a Paint Roller

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Paint and Appropriate Solvent
Plaster or Wallboard Mock-up

EQUIPMENT: Step Ladder
Drop Cloth
Roller Frame
Roller Cover
Roller Pan

TOOLS: Paint Brush

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-3-45

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Assemble the roller equipment.	
2. "Cut-in" the ceiling corner and trim with a brush.	. SC-3-49
3. Load the roller.	. SC-3-50
4. Apply the paint to the wall with a roller.	. SC-3-51 & IL-3-16
5. Clean the roller cover and equipment.	. SC-3-52

METHOD OF EVALUATION:

1. Was the roller equipment assembled correctly?
2. Was the ceiling corner "cut-in" neat and straight?
3. Was the roller loaded properly?
4. Was the proper rolling technique followed when applying the paint?
5. Was the paint rolled out uniformly without heavy edges?
6. Was the roller cover and equipment cleaned properly?

JOB: Patch Masonry Joints

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-3-46

UNIT III: Finishing

COURSE: Painting and Decorating

MATERIAL: Brick or Block Masonry Mock-up
Mortar Mix

EQUIPMENT: Mixing Pan
Drop Cloth

TOOLS: Triangular Trowel
Tuck Trowel
Calcimine Brush or an Old Worn Brush

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cut out all loose or defective mortar from the masonry joint.	. SC-3-53
2. Mix the mortar.	
3. Thoroughly wet the masonry joint.	
4. Fill the mortar joint using a triangular trowel and a tuck trowel.	. SC-3-54
5. Wash all tools with water.	

METHOD OF EVALUATION:

1. Was the mortar mixed to the proper consistency?
2. Was the joint filled completely?
3. Were all tools cleaned?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-1

JOB: Prepare Walls, Drywall

UNIT IV: Wallcovering

COURSE: Painting and Decorating

MATERIAL:
- Joint Compound
- Tape
- Drywall Primer
- Sandpaper
- Gluesize

EQUIPMENT:
- Ladders
- Planks
- Drop Cloth
- Roller
- Pan
- Bucket

TOOLS:
- Broadknife
- Triangular Trowel
- Brush
- Hammer
- Sizing Brush

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover work area with drop cloth.	
2. Mix joint compound.	
3. Tape and finish joints and nails.	
4. Sand and seal wall surface.	. IL-4-1
5. Gluesize wall surface.	

METHOD OF EVALUATION:

1. Was work area completely covered?
2. Was joint compound mixed to a good working consistency?
3. Were taped joints and nail heads feathered out adequately?
4. Was surface sanded completely and totally covered with primer?
5. Was gluesize applied freely to total wall area and all drips wiped from trim?

JOB: Prepare Walls, Plaster

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Spackling
Gluesize

EQUIPMENT: Stepladder
Plank
Drop Cloth

TOOLS: Broadknife
Triangular Trowel
Sizing Brush

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-2

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover work area with drop cloth.	
2. Spackle with broadknife.	
3. Spackle with triangular trowel.	. IL-4-1
4. Knife wall.	
5. Gluesize wall.	

METHOD OF EVALUATION:

1. Was work area completely covered?
2. Was spackling mixed to good working consistency?
3. Were spackled areas well feathered out?
4. Were rough areas knifed from wall?
5. Was entire area covered freely with sizing?

JOB: Estimate Wallpaper Needs

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

EQUIPMENT: Paper Pad

TOOLS: 6' Folding Rule
Pencil

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-3

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Measure area to be papered.	
2. Compute and estimate requirements.	

METHOD OF EVALUATION:

1. Were measurements made accurately?
2. Were computations correctly done?

JOB: Remove Wallcovering

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

EQUIPMENT: Electric Wallpaper Steamer
Step Ladder
Drop Cloth
Bucket
Funnel

TOOLS: Broadknife

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-4

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover work area with drop cloth.	
2. Charge and activate steamer.	. SC-4-1
3. Remove wallcovering.	

METHOD OF EVALUATION:

1. Was work area completely covered?
2. Was steamer charged and used according to instructions?
3. Was paper completely stripped and scraps cleaned up?

JOB: Set Up Folding Table

UNIT IV: Wallcovering

COURSE: Painting and Decorating

EQUIPMENT: Folding Pasting Table

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-5

SAFETY PRECAUTIONS:

Use caution not to pinch fingers in braces of legs

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up pasting table.	. SC-4-2

METHOD OF EVALUATION:

Was table set up carefully with leg braces securely locked?

JOB:	Cut Short Lengths of Random Match Paper	JOB SHEET IDENTIFICATION CODE
UNIT IV:	Wallcoverings	JOB NUMBER: J-4-6
COURSE:	Painting and Decorating	
MATERIAL:	Random Match Wall Paper	
EQUIPMENT:	Papering Table	
TOOLS:	Paper Hangers Shears Yardstick and/or Square Straightedge	

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. SC-4-2
2. Cut paper with shears.	. SC-4-3
3. Tear paper using square and/or yardstick.	. SC-4-3

METHOD OF EVALUATION:

1. Was table set up securely?
2. Was paper cut at a reasonably good 90 angle?
3. Was the paper torn straight with no ragged edges at a 90 angle?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-7

JOB: Paste Wallpaper from J-4-6

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Paper (Random Match) cut in J-4-6
Various Pastes

EQUIPMENT: Folding Table
Bucket
Folding Bucket Stand

TOOLS: Paste Brush
Paste Whip

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. SC-4-2
2. Select type of wallpaper paste.	. IL-4-3
3. Mix paste.	. SC-4-4
4. Set up folding bucket stand.	. SC-4-5
5. Paste wallpaper.	. SC-4-6 & SC-4-7
6. Fold wallpaper.	. SC-4-8

METHOD OF EVALUATION:

1. Was paste accurately selected for material being used?
2. Was paste mixed to required consistency?
3. Was paper pasted evenly and freely?
4. Was paper folded in a fashion to keep paste from face side and allow ease of handling?

JOB: Practice Marking Plumb Line

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

TOOLS: Plumb Bob
Spirit Level
Folding Rule

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-8

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mark several plumb lines a specified distance apart using plumb bob and level.	. SC-4-9

METHOD OF EVALUATION:

Were lines drawn neatly and accurately plumb?

JOB: Hand and Seam Strips of Paper from Job J-4-7

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-9

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Wallcovering Strips from J-4-7
Paste

EQUIPMENT: Paste Table
Bucket
Folding Bucket Stand

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Shears

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mix paste.	. SC-4-4
2. Set up bucket stand.	. SC-4-5
3. Establish plumb line.	. SC-4-9
4. Paste wallpaper.	. SC-4-6 & SC-4-7
5. Fold pasted wallpaper.	. SC-4-8
6. Unfold paper.	. SC-4-10
7. Position strip to vertical line.	. SC-4-10
8. Smooth wallpaper.	. SC-4-11
9. Roll seams.	. SC-4-12

METHOD OF EVALUATION:

1. Was paper unfolded carefully?
2. Was paper accurately positioned to vertical line?
3. Was paper completely smoothed and seams rolled?

JOB: Measure Wall Height

UNIT IV: Wallcovering

COURSE: Painting and Decorating

TOOLS: Folding Rule

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-10

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Measure several different wall heights.	

METHOD OF EVALUATION:

Were measurements taken accurately?

JOB: Cut Straight Pattern Match
UNIT IV: Wallcovering
COURSE: Painting and Decorating
MATERIAL: Straight Match Wallpaper
EQUIPMENT: Paste Table
TOOLS: Folding Rule
Square and/or Yardstick
Straightedge
Shears

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-11

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. SC-4-2
2. Measure strips.	. SC-4-3 & IL-4-4
3. Cut strips with shears.	
4. Tear paper with yardstick and/or square.	
5. Cut straight match.	

METHOD OF EVALUATION:

Was the paper cut so pattern matches accurately?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-12

JOB: Cut Drop Match Wallpaper

UNIT IV: Wallcovering

COURSE: Painting and Decorating

MATERIAL: Drop Match Wallpaper

EQUIPMENT: Paste Table

TOOLS: Folding Rule
Square and/or Yardstick
Straightedge
Shears

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. IL-4-5
2. Measure strips.	
3. Cut drop match -- tear drop match.	

METHOD OF EVALUATION:

Was paper cut allowing for match of drop pattern and holding to ceiling (starting) line?

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-4-13

JOB: Hang Straight Match Paper Cut In J-4-11

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Wallcovering Strips (J-4-11)
Paste

EQUIPMENT: Paste Table
Bucket
Folding Bucket Stand

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Shears

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mix paste.	. SC-4-4
2. Set up bucket stand.	. SC-4-5
3. Establish plumb line.	. SC-4-9
4. Paste wallpaper.	. SC-4-7
5. Fold wallpaper.	. SC-4-6
6. Unfold paper.	. SC-4-8
7. Select types of wallpaper-straight match.	. SC-4-10
8. Position strip to vertical line.	. IL-4-4
9. Smooth Wallpaper.	. SC-4-11
10. Roll seam.	. SC-4-12
11. Trim paper--broadknife and razor knife.	. SC-4-14
12. Trim paper at ceiling and base molding.	. SC-4-13
	. SC-4-15
	. IL-4-6

METHOD OF EVALUATION:

1. Was paper accurately cut allowing for pattern match?
2. Was paper accurately positioned to vertical line?
3. Were seams rolled?
4. Was paper accurately and neatly trimmed top and bottom?
5. Was the ceiling and base molding wiped clean of paste.
6. Are all pieces of stock clear of air bubbles and/or wrinkles?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-14

JOB: Hang Drop Match Cut in J-4-12

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Wallcovering Strips (J-4-12)

EQUIPMENT: Paste Table
Bucket
Folding Bucket Stand

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. IL-4-5
2. Mix paste.	. SC-4-11
3. Set up bucket stand.	. SC-4-12
4. Establish plumb line.	. SC-4-13
5. Paste paper.	. SC-4-14
6. Fold paper	. SC-4-15
7. Unfold paper.	. SC-4-16
8. Select type of paper matches--drop.	
9. Position strip to vertical line.	
10. Smooth paper.	
11. Roll seam.	
12. Cut drop match pattern.	
13. Trim paper--broadknife and razor knife.	
14. Trim paper at ceiling and base molding.	
15. Trim to corner molding.	

COMPETENCE - PROCEDURES/STEPS | TEACHING/LEARNING ACTIVITIES

METHOD OF EVALUATION:

1. Was paper accurately cut allowing for pattern match?
2. Was paper accurately positioned to vertical line?
3. Were seams rolled?
4. Was paper accurately and neatly trimmed top and bottom?
5. Are all pieces of stock clear of air bubbles and/or wrinkles?
6. Was the ceiling and base molding wiped clean of paste?

JOB: Hang Paper Around an Inside Corner

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-15

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Wallcovering
Paste

EQUIPMENT: Paste Bucket
Folding Bucket Stand
Table

TOOLS: Paste Bucket
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Straightedge

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. IL-4-7
2. Mix paste.	. SC-4-12
3. Set up bucket stand.	. SC-4-15
4. Establish plumb line.	
5. Paste paper.	
6. Fold paper.	
7. Use straightedge.	
8. Unfold paper.	
9. Hand paper around inside corner.	
10. Smooth paper.	
11. Roll seams.	
12. Trim paper at ceiling and base molding.	

METHOD OF EVALUATION:

1. Was paper positioned to allow adequate fold into corner and still provide an acceptable pattern match?
2. Was paper neatly and accurately trimmed top and bottom?
3. Was a vertical line drawn for price of stock coming out of the corner?
4. Was the ceiling and base molding wiped clean of paste?
5. Are all pieces of stock clean of air bubbles and/or wrinkles?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-16

JOB: Hang Paper Around an Outside Corner

UNIT IV: Wallcovering

COURSE: Painting and Decorating

MATERIAL: Wallcovering
Paste

EQUIPMENT: Paste Bucket
Folding Bucket Stand
Table

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Straightedge

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table.	. IL-4-7
2. Mix paste.	. SC-4-15
3. Set up bucket stand.	
4. Establish plumb line.	
5. Paste paper.	
6. Fold paper.	
7. Use straightedge.	
8. Unfold paper.	
9. Hang paper around outside corner.	
10. Smooth paper.	
11. Roll seams.	
12. Trim paper at ceiling and base molding.	

METHOD OF EVALUATION:

1. Was paper positioned to allow adequate fold around corner and still provide an acceptable pattern match?
2. Was paper neatly and accurately trimmed top and bottom?
3. Was a vertical line drawn for the price of stock coming away from corner?
4. Was ceiling and base molding wiped clean of paste?
5. Are all prices of stock clear of air bubbles and/or wrinkles?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-17

JOB: Hang Paper Around Door Casing

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Wallcovering
Paste

EQUIPMENT: Paste Bucket
Folding Bucket Stand
Table

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Straightedge

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table and equipment, prepare paper and paste for hanging.	. IL-4-8
2. Use straightedge if needed.	
3. Position paper around a cased door opening.	
4. Smooth paper, roll seams and trim at ceiling and base molding.	

METHOD OF EVALUATION

1. Was paper neatly and accurately trimmed around casing?
2. Was relief neatly cut at top of door casing allowing for neat fit?
3. Were air bubbles removed and casing, ceiling and base molding wiped clear of paste?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-18

JOB: Hang Wallpaper Around a Window

UNIT IV: Wallcovering

COURSE: Painting and Decorating

MATERIAL: Wallcovering
Paste

EQUIPMENT: Paste Bucket
Folding Bucket Stand
Table

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Straightedge

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up table and equipment, prepare paper and paste for hanging.	. IL-4-8
2. Use straightedge if needed.	
3. Position paper around opening (cased window)	
4. Smooth paper, roll seams and trim at ceiling and base molding.	

METHOD OF EVALUATION:

1. Was paper relief neatly cut top and bottom of window to allow neat fit?
2. Were air bubbles removed and casing, ceiling and base molding wiped clean of paste?
3. Was the proper procedure followed for positioning strips around the window?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-19

JOB: Paper an Arched Opening

UNIT IV: Wallcovering

COURSE: Painting and Decorating

MATERIAL: Wallcovering
Paste

EQUIPMENT: Table
Bucket
Bucket Stand

TOOLS: Paste Whip
Level and/or Plumb Bob
Smoothing Brush
Seam Roller
Straightedge

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up equipment, prepare paper and paste for hanging.	. IL-4-9
2. Apply paper to arched opening.	
3. Smooth, roll seams, and trim at base molding.	

METHOD OF EVALUATION:

1. Was the paper notched around the arched edge adequately to allow the tabs to lay flat on inside of arch?
2. Was the stock hung smoothly on the inside of arch (from both sides)
3. Were edges trimmed neatly on edge of arch?
4. Were edges rolled down securely?

JOB: Hang Paper on Ceiling

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Ceiling Stock
Paste

EQUIPMENT: Table
Bucket
Bucket Stand
Chalk Line

TOOLS: Paste Whip
Paste Brush
Smoothing Brush
Seam Roller
Straightedge

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-20

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up equipment, prepare paper and paste for hanging.	. IL-4-10
2. Apply paper to ceiling.	
3. Smooth, roll seams, and trim ends.	

METHOD OF EVALUATION:

1. Was first piece hung with one edge lapped down over side wall an appropriate distance.
2. Were seams neatly butted and rolled down securely?
3. Were all air bubbles and wrinkles removed?

JOB: Hang Felt Wallcovering

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Felt
Paste

EQUIPMENT: Table
Bucket
Bucket Stand

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Seam Roller
Straightedge

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-21

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up equipment.	
2. Prepare felt and paste for hanging.	
3. Smooth felt and trim.	NOTE: Be sure to refer to appropriate information on peculiarities in dealing with felt.

METHOD OF EVALUATION:

I. Was felt applied according to manufacturers instructions?
   A. Not stretched
   B. Appropriately pasted
   C. Trimmed neatly
   D. Proper paste used
   E. Paste, kept from face of felt

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-4-22

JOB: Hang Foil Wallcovering

UNIT IV: Wallcoverings

COURSE: Painting and Decorating

MATERIAL: Foil
Paste

EQUIPMENT: Table
Bucket
Bucket Stand

TOOLS: Paste Whip
Level and/or Plumb Bob
Paste Brush
Smoothing Brush
Cambric Covered Seam Roller
Straightedge

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set up equipment.	
2. Prepare foil and surface for hanging.	NOTE: Be sure to refer to appropriate information on the peculiarities in dealing with foil.
3. Smooth foil on surface and trim.	

METHOD OF EVALUATION:

1. Was foil hung with care deserving of this quality material?
    - A. No creases
    - B. Properly smoothed
    - C. No air bubbles
    - D. No paste on face side

JOB: Prepare Paint

UNIT V: Spray Painting

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

TOOLS: Viscosity Meter

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-5-1

SAFETY PRECAUTIONS:

Do not thin paint beyond manufacture's instructions

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Stir and strain paint.	
2. Thin paint.	. IL-5-1
3. Check viscosity.	. SC-5-1

METHOD OF EVALUATION:

1. Was paint adequately stirred and cleaned by straining?
2. Was paint thinned to proper viscosity as per viscosity meter?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-5-2

JOB: Assemble a Conventional Spray Gun

UNIT V: Spray Painting

COURSE: Painting and Decorating

EQUIPMENT: Spray Gun

TOOLS: Universal Gun Wrench

SAFETY PRECAUTIONS:

Exercise extreme care in handling the fluid nozzle due to the possibility that the orifice can be easily damaged.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Disassemble conventional spray gun.	
2. Assemble conventional spray gun.	. SC-5-2

METHOD OF EVALUATION:

1. Were proper tools used in disassembly and reassembly?
2. Were packing nuts lubricated and tightened properly?
3. Were parts reassembled in logical sequence?

JOB: Set Air Regulator

UNIT V: Spray Painting

COURSE: Painting and Decorating

EQUIPMENT: Air Regulator

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-5-3

SAFETY PRECAUTIONS:

Make sure regulator knob is unscrewed before turning on main air.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set regulator pressure at 45 pounds.	
2. Remove moisture from extractor.	. SC-5-3

METHOD OF EVALUATION:

1. Was pressure set at 45 pounds?
2. Was all moisture removed from extractor?

JOB: Practice Spray Painting

UNIT V: Spray Painting

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

EQUIPMENT: Spray System (with Gun and Regulator)
Respirator

TOOLS: Universal Gun Wrench
Strainer
Stirring Paddle
Viscosity Cup

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-5-4

SAFETY PRECAUTIONS:

Wear respirator approved by OSHA for material being sprayed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Stir, strain and thin paint.	. IL-5-1
2. Check viscosity.	. SC-5-1
3. Assemble gun.	. SC-5-2
4. Adjust regulator.	. SC-5-3
5. Check spray pattern.	. IL-5-2
6. Practice spraying flat vertical surface.	. IL-5-3
7. Clean spray gun.	. SC-5-4

METHOD OF EVALUATION:

1. Was the paint prepared properly?
2. Was gun assembled properly and adjusted?
3. Was pattern set properly for surface sprayed?
4. Was gun thoroughly cleaned for storage?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-5-5

JOB: Spray Horizontal Surface

UNIT V: Spray Painting

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

EQUIPMENT: Spray System (with Gun and Regulator)
Respirator

TOOLS: Universal Gun Wrench
Strainer
Stirring Paddle
Viscosity Cup

SAFETY PRECAUTIONS:

Wear respirator approved by OSHA for material being sprayed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Stir, strain and thin paint.	. IL-5-1
2. Check viscosity.	. SC-5-1
3. Assemble gun.	. SC-5-2
4. Adjust regulator.	. SC-5-3
5. Check spray pattern.	. IL-5-2
6. Spray flat surface.	. IL-5-4
7. Clean spray gun.	. IL-5-3
	. SC-5-5

METHOD OF EVALUATION:

1. Was the paint prepared properly?
2. Was gun assemble properly and adjusted?
3. Was pattern set properly for surface sprayed?
4. Was gun thoroughly cleaned for storage?

JOB: Spray Piece of Furniture (or Other Appropriate "Live" Job)

JOB SHEET IDENTIFICATION CODE

UNIT V: Spray Painting

JOB NUMBER: J-5-6

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

EQUIPMENT: Spray System (with Gun and Regulator)
Respirator

TOOLS: Universal Gun Wrench
Strainer
Stirring Paddle
Viscosity Cup

SAFETY PRECAUTIONS:

Wear respirator approved by OSHA for material being sprayed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Prepare paint and system for spraying.	
2. Spray object assigned by instructor.	. IL-5-4 & IL-5-5

METHOD OF EVALUATION:

1. Was object sprayed using proper sequence of moves?
2. Was paint film smooth and even free of runs?

JOB: Spray Vertical Surface

UNIT V: Spray Painting

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

EQUIPMENT: Spray System (with Gun and Regulator)
Respirator

TOOLS: Universal Gun Wrench
Strainer
Stirring Paddle
Viscosity Cup

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-5-7

SAFETY PRECAUTIONS:

Wear respirator approved by OSHA for material being sprayed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Stir, strain and thin paint.	
2. Check viscosity.	
3. Assemble gun.	. SC-5-2
4. Adjust regulator.	. SC-5-3
5. Check spray pattern.	. IL-5-2
6. Spray vertical surface.	. SC-5-5
7. Clean spray gun.	. IL-5-3
	. SC-5-6

METHOD OF EVALUATION:

1. Was paint properly prepared?
2. Was gun assembled and adjusted properly?
3. Was pattern set properly for surface sprayed?
4. Was gun thoroughly cleaned for storage?

JOB: Spray Slender Surface

UNIT V: Spray Painting

COURSE: Painting and Decorating

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-5-8

MATERIAL: Paint
Thinner

EQUIPMENT: Spray System (with Gun and Regulator)
Respirator

TOOLS: Universal Gun Wrench
Strainer
Stirring Paddle
Viscosity Cup

SAFETY PRECAUTIONS:

Wear respirator approved by OSHA for material being sprayed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Stir, strain and thin paint.	
2. Check viscosity.	
3. Assemble gun.	. SC-5-7
4. Adjust regulator.	
5. Check spray pattern.	
6. Spray slender surface.	
7. Clean spray gun.	

METHOD OF EVALUATION:

1. Was entire surface area coated evenly?
2. Was gun cleaned properly?

JOB: Spray Corners

JOB SHEET
IDENTIFICATION CODE

UNIT V: Spray Painting

JOB NUMBER: J-5-9

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

EQUIPMENT: Spray System (with Gun and Regulator)
Respirator

TOOLS: Universal Gun Wrench
Strainer
Stirring Paddle
Viscosity Cup

SAFETY PRECAUTIONS:

Wear respirator approved by OSHA for material being sprayed.

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Prepare paint and system for spraying.	
2. Spray inside corner.	
3. Spray outside corner.	. SC-5-8

METHOD OF EVALUATION:

1. Was corner sprayed using proper sequence of movements?
2. Was surface free of runs?
3. Was equipment properly cleaned and put away?

JOB:	Practice Air Brush Set-Up	JOB SHEET IDENTIFICATION CODE
UNIT V:	Spray Painting	JOB NUMBER: J-5-10
COURSE:	Painting and Decorating	
MATERIAL:	Paint Thinner	
EQUIPMENT:	Air Brush Compressor	
TOOLS:	Bristle Brush	

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fill air brush.	. SC-5-9
2. Clean air brush.	. SC-5-10

METHOD OF EVALUATION:

1. Was air brush set up properly?
2. Was air brush cleaned properly?

JOB SHEET IDENTIFICATION CODE

JOB NUMBER: J-5-11

JOB: Use Air Brush

UNIT V: Spray Painting

COURSE: Painting and Decorating

MATERIAL: Paint
Thinner

EQUIPMENT: Air Brush
Compressor

TOOLS: Bristle Brush

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fill air brush.	. SC-5-9
2. Hold air brush.	. SC-5-10
3. Operate air brush.	. SC-5-11
4. Clean air brush.	. SC-5-12

METHOD OF EVALUATION:

1. Was air brush set up properly?
2. Was material of the proper consistancy?
3. Were spray movements done correctly?
4. Was gun cleaned properly?

JOB: Prepare a Stencil Pattern

UNIT VI: Special Finishes

COURSE: Painting and Decorating

MATERIAL: Stencil Paper
Sample Stencil Pattern

TOOLS: Stencil Knives or Ex-acto Knives
Pencil
Rule

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-6-1

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out stencil.	. IL-6-1
2. Cut stencil.	. SC-6-1

METHOD OF EVALUATION:

1. Was spacing correct?
2. Was symmetry good?
3. Were cut edges sharp, clean and not undercut?

JOB:	Apply a Stencil Pattern to a Panel or Wall Surface	JOB SHEET IDENTIFICATION CODE
UNIT VI:	Special Finishes	JOB NUMBER: J-6-2
COURSE:	Painting and Decorating	
MATERIAL:	Paint Appropriate Solvent	
TOOLS:	Stencil Brush Pallet	

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lay out stencil.	. IL-6-1
2. Cut stencil.	. SC-6-1
3. Apply stencil to surface.	. SC-6-2

METHOD OF EVALUATION:

1. Was stencil set properly and correctly to line?
2. Are there no runs in stencil register?
3. Was stencil cleaned and stored properly?

JOB SHEET
IDENTIFICATION CODE

JOB NUMBER: J-6-3

JOB: Apply Textured Wall Paint

UNIT VI: Special Finishes

COURSE: Painting and Decorating

MATERIAL: Premixed Textured Paint
Appropriate Solvent

TOOLS: Roller Frame
Carpet Mat Roller Cover
Roller Pan
Stirring Paddle

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Brush or roll paint to surface.	. SC-6-3
2. Texture painted surface with carpet mat roller cover.	. SC-6-4
	NOTE: It is realized that many more methods of texturizing exists: It is therefore, suggested that as many of these be practiced as the instructor wishes.

METHOD OF EVALUATION:

1. Was build-up adequate to texture effectively?
2. Was texturizing uniform but not too symmetrical?

OPERATION SHEET
SC-2-1

COMPETENCY: Drive Nails with a Claw Hammer

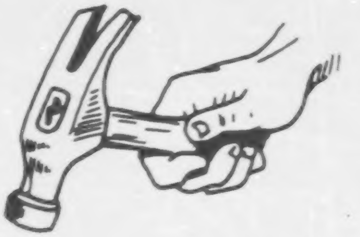
COURSE: Painting and Decorating

UNIT II: Small Tools

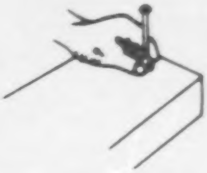
OBJECTIVE: The student will be able to drive nails efficiently

Page 1 of 2 pages

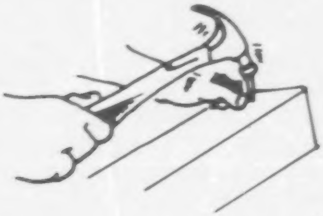
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold the hammer with fingers underneath and your thumb alongside or on top of the handle.	NOTE: Except for light blows, the handle is held close to the end.



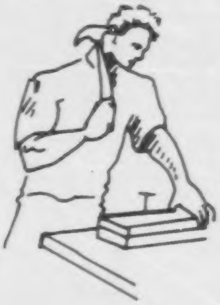
2. Hold the nail between the fingers and thumb of other hand, using the rest of the hand to help position the nail.	



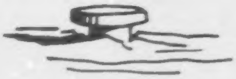
3. Rest the face of the hammer on the head of the nail and raising the hammer slightly, give the nail a light tap.	NOTE: This starts the nail and will help to set the aim of the nail.



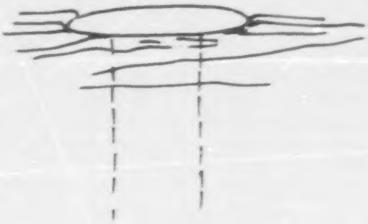
4. Line the hammer up so as to strike squarely and avoid nailing or marring the wood.



5. Drive the nail until the head is almost level with the surface of the wood.



6. Finish driving the nail with light blows so as not to damage the surface of the wood.



OPERATION SHEET
SC-2-2

COMPETENCY: Pull Headless Nails with a Claw Hammer

COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to master the proper technique for pulling headless nails

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS
The student will be able to:

TEACHING/LEARNING ACTIVITIES

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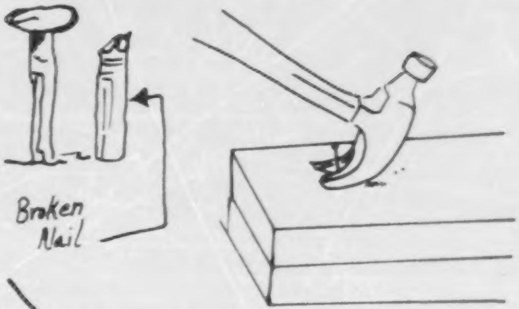
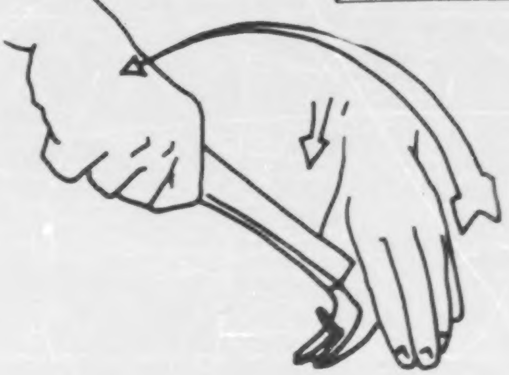
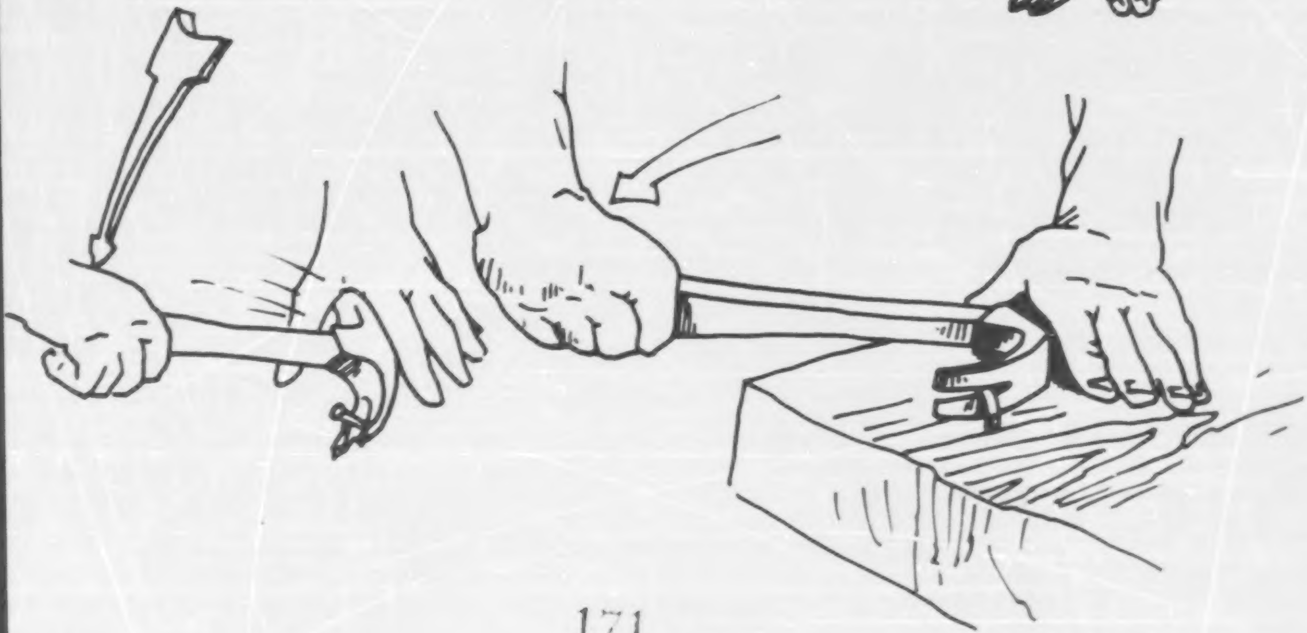
1. Place the hammer claws in position on the nail.



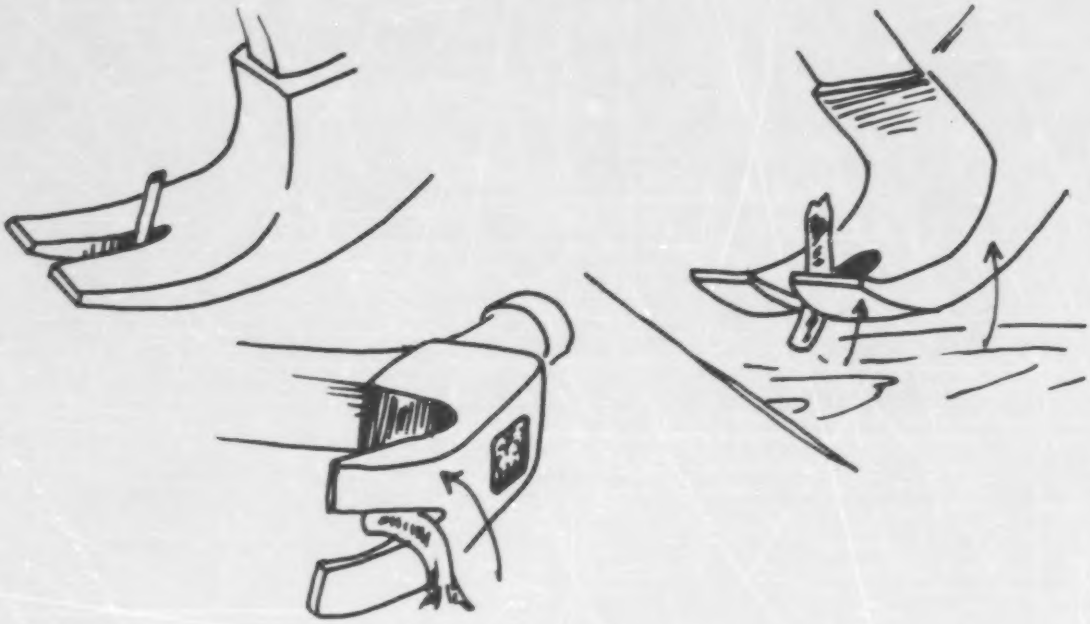
2. Apply firm forward pressure to the hammer head with one hand.



3. With the other hand, pull the hammer sideways until it touches the stock.



4. Repeat steps 1, 2, and 3 until the nail is out.



OPERATION SHEET
SC-2-3

COMPETENCY: Use a Ripping Hammer

COURSE: Painting and Decorating

UNIT II: Small Tools

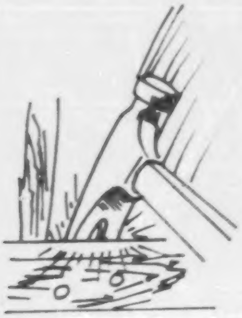
OBJECTIVE: The student will be able to rip wood structures and joints apart

Page 1 of 1 page

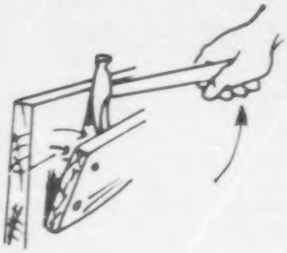
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold ripping hammer with the claw toward the work.

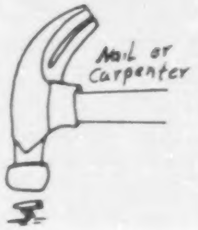
2. Strike the claw into the work area, firmly.

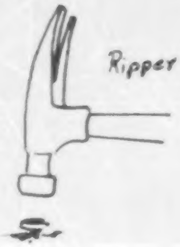


3. Pry the pieces apart.



NOTE: The ripper can be used to split wood and also for driving nails.





OPERATION SHEET
SC-2-4

COMPETENCY: Use a Magnetic Tack Hammer

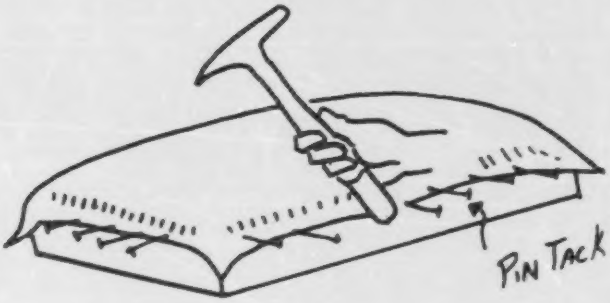
COURSE: Painting and Decorating UNIT II: Small Tools

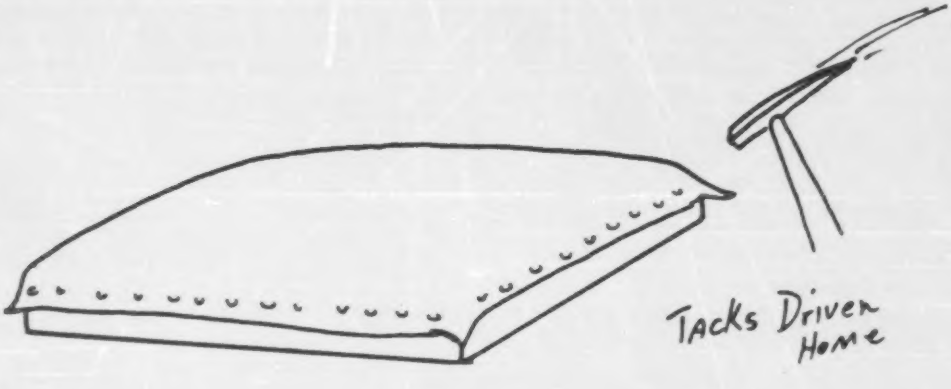
OBJECTIVE: The student will be able to properly tack fabric with an upholsters tack hammer

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Set the tack on the magnetic end or split end of hammer.
2. Grip near end of handle firmly to get better leverage.
3. Set pin tack in place.
4. Drive tacks home using the solid end of hammer.





OPERATION SHEET
SC-2-5

COMPETENCY: Lay Out Stock to Length by Measuring

COURSE: Painting and Decorating — UNIT II: Small Tools

OBJECTIVE: The student will be able to measure and mark stock to specifications without error

Page 1 of 3 pages

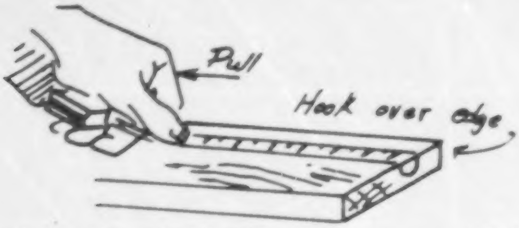
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

MEASURE:

1. Steel Tape

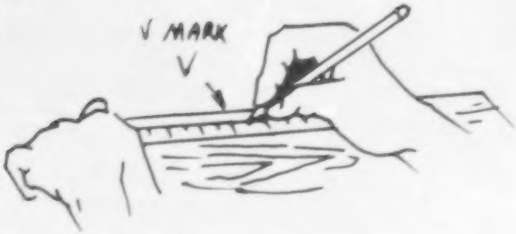
   A. Hook the end of the tape on to the end of the stock and extend the tape by pulling on the case.

   NOTE: The tape should lay parallel to the edge of the stock.



   B. Place a mark on the stock close to the edge of the tape at the desired dimension.

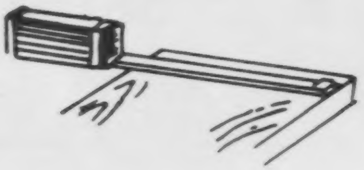
   NOTE: A "V" mark is used by many carpenters with the point of the "V" indicating the exact measurement.



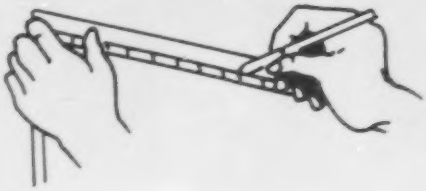
2. Folding Rule

   A. Open enough sections of the rule to take the measurement.

   B. Place the rule flat on the stock, parallel to the edge and with the end of the rule even with the end of the stock.



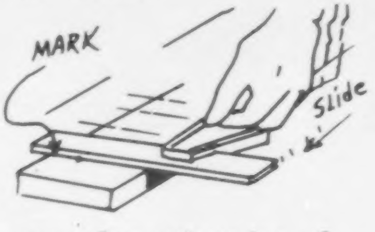
C. Place a mark on the stock close to the edge of the rule as with a steel tape.



SQUARE A LINE:

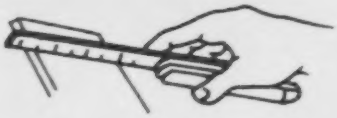
1. Try square or combination square.

   A. Place the head of the square against the edge of the stock.

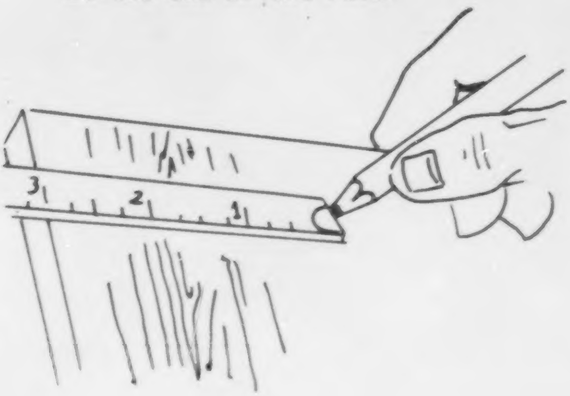


   B. Slide the square along the edge of the stock until the edge of the blade is aligned with the mark to be squared.

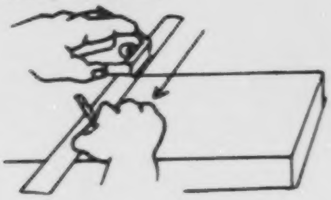
NOTE: More accurate measurements can be taken with the rule held on edge.



NOTE: Another method commonly used when using the folding rule is to place the rule in position so the desired dimension is even with the end of the stock; then place a mark at the end of the rule.



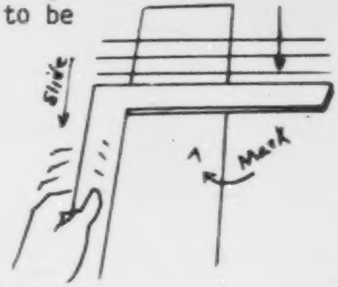
C. Mark a line along the edge of the blade with a sharp pencil.



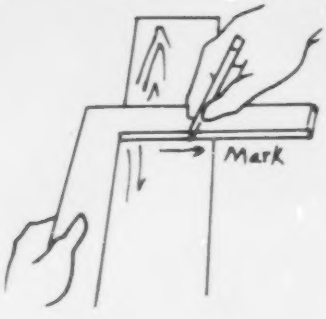
2. Frame a Square

A. Place the inside edge of the blade against the edge of the stock.

B. Slide the square along the stock until the edge of the tongue is aligned with the mark to be squared.



C. Mark along the edge of the tongue.



NOTE: A square line may be laid out on wider stock by placing the tongue of the framing square against the edge of the stock and marking along the blade.

When squaring a line on thin material, align the outer edge of the blade even with the edge of the material and mark along the tongue.

OPERATION SHEET
SC-2-6

COMPETENCY: Set Finish or Casing Nails

COURSE: Painting and Decorating

UNIT II: Small Tools

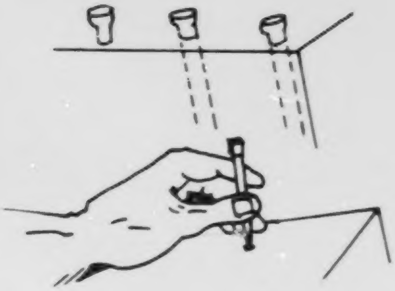
OBJECTIVE: The student will be able to set finish or casing nails to the correct depth

Page 1 of 1 page

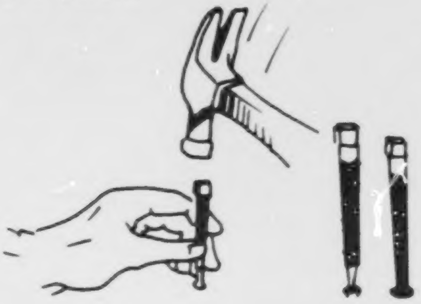
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Drive the nail until only the head of it is above the surface of the stock.
2. Hold the nail set on the nail.

NOTE: Part of the hand should rest on the stock to keep the nail set from slipping off the nail.



3. Press the nail set firmly against the nail and strike the nail set sharply with the hammer to drive the head of the nail 1/16" to 1/8" below the surface of the stock.



OPERATION SHEET
SC-2-7

COMPETENCY: Pull Nails with a Nail Puller

COURSE: Painting and Decorating

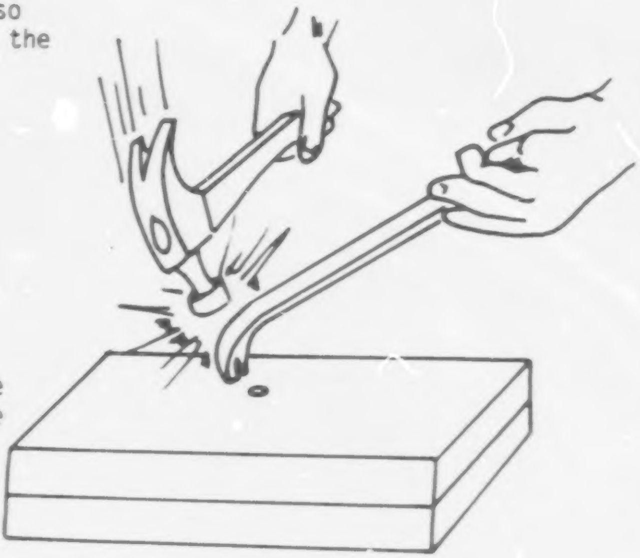
UNIT II: Small Tools

OBJECTIVE: The student will be able to use the nail puller to pull nails efficiently

Page 1 of 2 pages

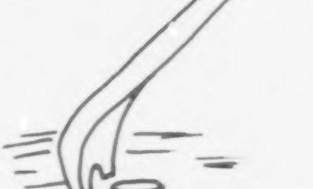
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

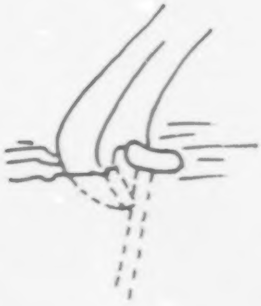
1. Drive the nail puller into the wood so that the head of the nail is between the claws.

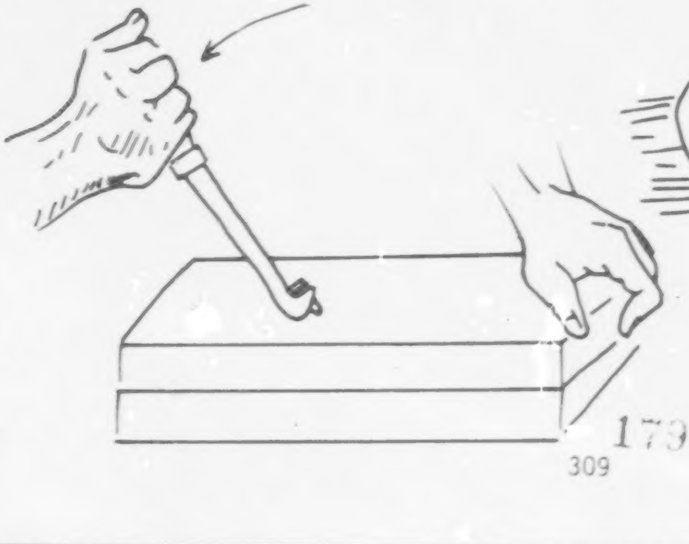


2. Drive the claws under the head of the nail while bringing the handle of the puller into line with the nail.

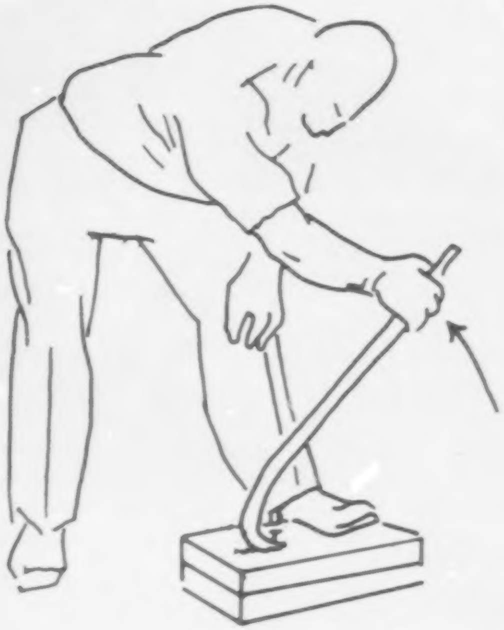
3. Seat claws firmly under the nail head, pull back on the handle and begin to remove the nail.

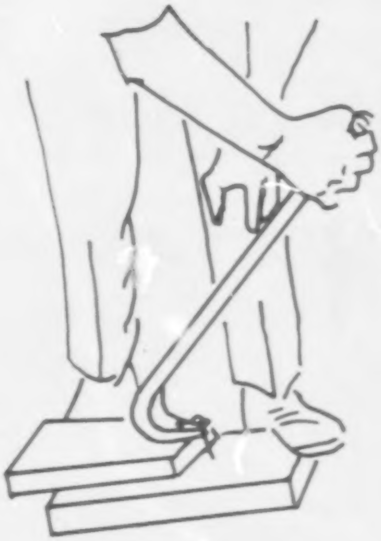






4. Remove the rest of the nail with a hammer or a pinch bar.





COMPETENCY: Layout Parallel Lines with a Combination Square

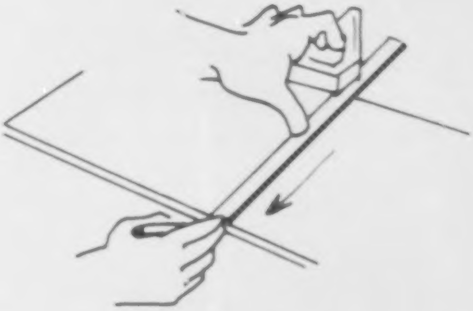
COURSE: Painting and Decorating UNIT II: Small Tools

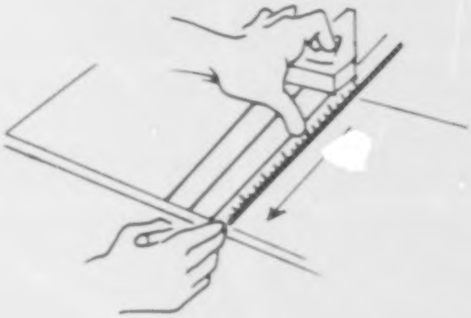
OBJECTIVE: The student will be able to properly and efficiently lay out parallel lines with the combination square

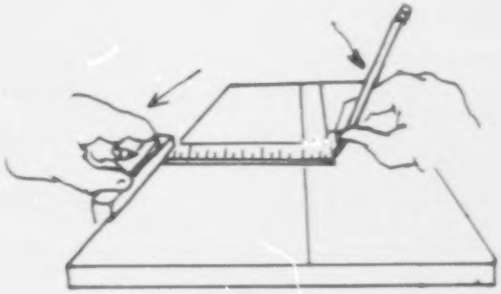
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Adjust blade to the desired measurement.
2. Place the combination square against the stock.
3. Place the pencil at the end of the blade and pull the square in while marking the stock.
4. Readjust the blade to desired measurement.
5. Make second line as in steps 2 and 3 parallel to the first line.







OPERATION SHEET
SC-2-9

COMPETENCY: Lay Out a Square Line on Stock with Framing Square

COURSE: Painting and Decorating **UNIT II:** Small Tools

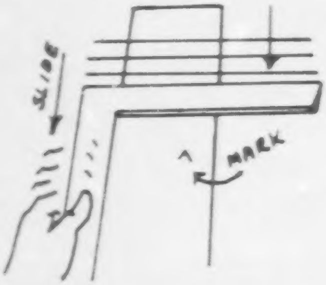
OBJECTIVE: The student will be able to accurately lay out a square line on stock using the framing square

Page 1 of 1 page

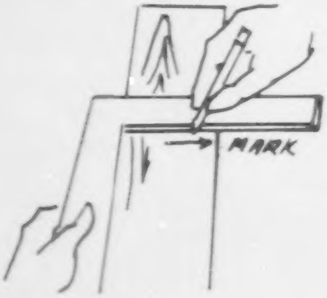
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place the inside edge of the blade against the edge of the stock.

2. Slide the square along the stock until the edge of the tongue is aligned with the mark to be squared.

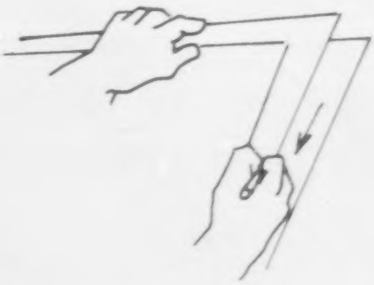


3. Mark along the edge of the tongue.



NOTE: A square line may be laid out on wider stock by placing the tongue of the framing square against the edge of the stock and marking along the blade.

When squaring a line on thin material, align the outer edge of the blade even with the edge of the material and mark along the tongue.



OPERATION SHEET
SC-2-10

COMPETENCY: Chisel Across Grain

COURSE: Painting and Decorating

UNIT II: Small Tools

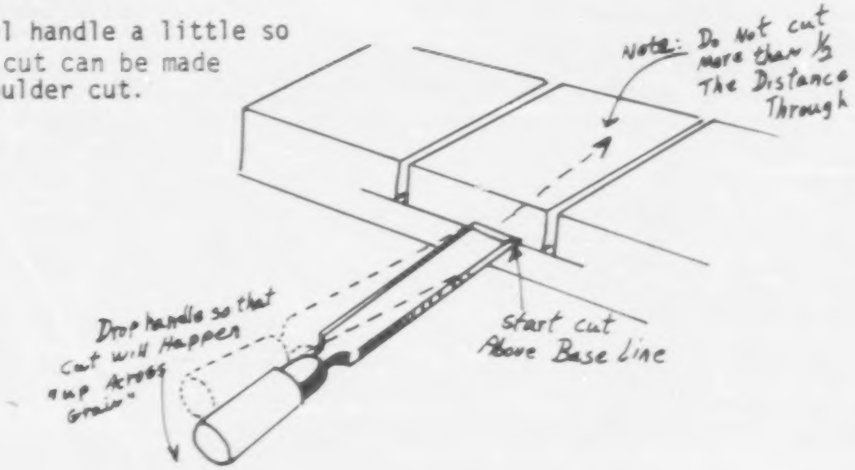
OBJECTIVE: The student will be able to remove stock with a wood chisel across grain

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold the cutting edge of the chisel a little above the horizontal guide line with the level side up.

2. Lower the chisel handle a little so that an upward cut can be made between the shoulder cut.

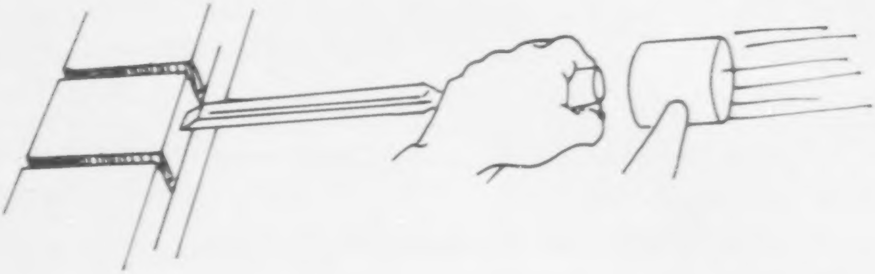


Note: Do Not cut more than 1/3 The Distance Through

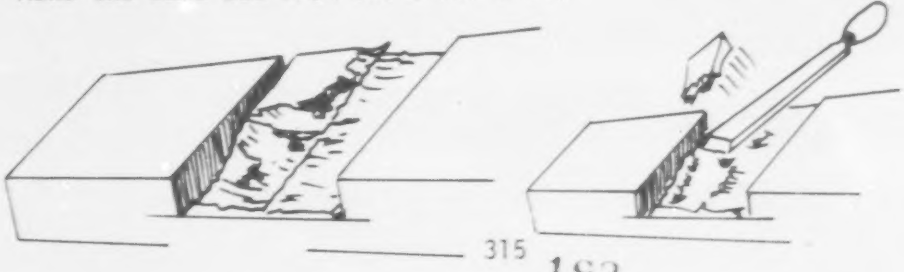
Drop handle so that cut will Happen "up Across Grain"

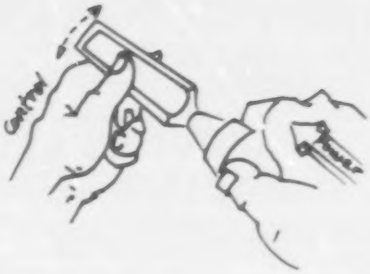
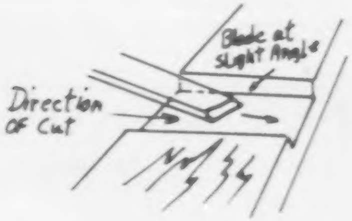
Start cut Above Base Line

3. Strike the handle of the chisel a light blow with the mallet and remove the stock.



4. Make the same cut from the other side.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
5. Make the final paring cut, placing the cutting edge of the chisel on the horizontal line with the bevel face up.	NOTE: Hold the blade of the chisel in the left hand and the handle in the right.
	
6. Push on the handle with steady, even pressure with right hand and guiding the chisel with left hand, press forefinger and thumb together on the chisel.	
 Blade at slight Angle Direction of Cut	
7. Hold the chisel at a slight angle to the direction of the cut, so that shearing cut will be made.	NOTE: To keep the stock from splintering, cut from each side toward the center. Take out the center stock last.

OPERATION SHEET
SC-2-11

COMPETENCY: Lay Out a Square Line on Stock with the Combination Square

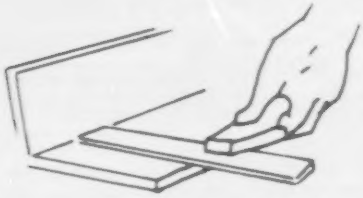
COURSE: Painting and Decorating

UNIT II: Small Tools

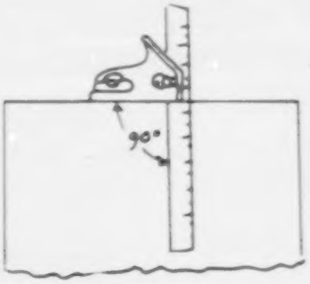
OBJECTIVE: The student will be able to accurately lay out a square line on stock

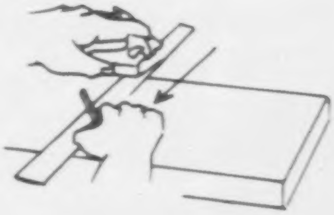
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place the body or head of the square along or against the finished edge of the stock.	NOTE: Make sure the blade or tongue of the square touches both places as shown.



2. Mark along the outside edge of the tongue or blade of the square.





OPERATION SHEET
SC-2-12

COMPEIENCY: Cut Stock to a Line With a Handsaw

COURSE: Painting and Decorating — UNIT II: Small Tools

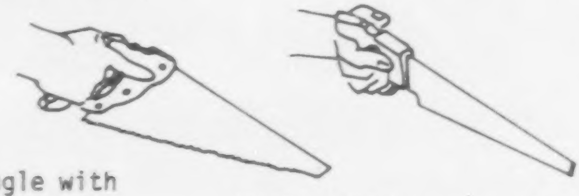
OBJECTIVE: The student will be able to cut stock accurately

Page 1 of 3 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

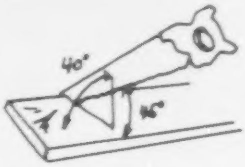
CUTTING WITH A HANDSAW

1. Place material on saw horse or clamp in a bench vise.
2. Hold the saw with the thumb and forefinger extended along the side of the handle.

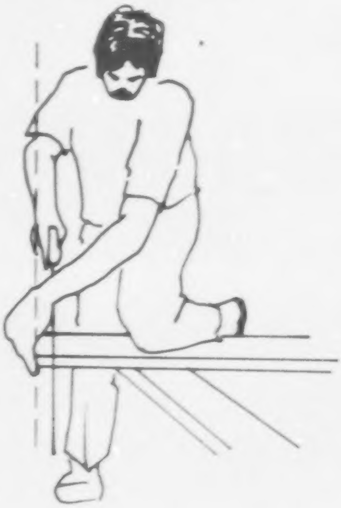


3. Hold the saw at about a 45° angle with the face of the board for crosscutting

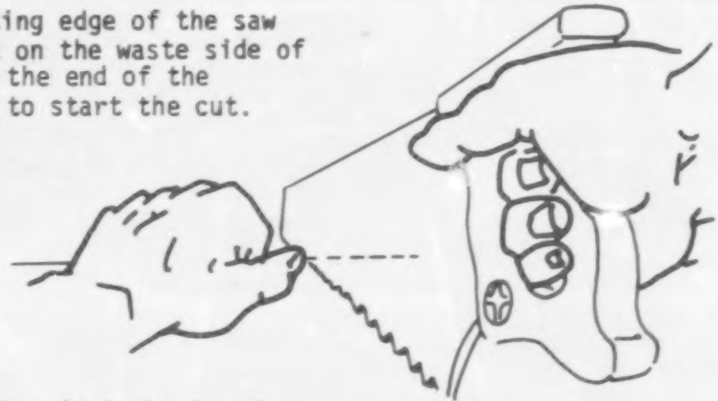
NOTE: Hold saw at 60 angle for ripping.



4. Position oneself so that a straight line is formed from the tip of the saw through the handle, the forearm, and the tip of the shoulder.



5. Position the cutting edge of the saw against the stock on the waste side of the line and use the end of the thumb as a guide to start the cut.

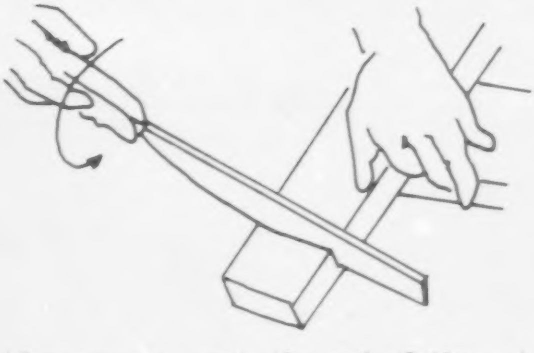


6. Start the cut with a light backward stroke.

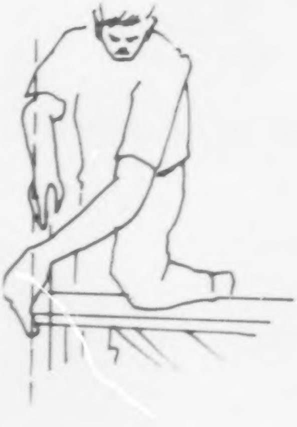
NOTE: The strokes at the beginning should be short and light, gradually becoming longer and heavier as the cut is made.

7. Bring the saw back to line by a slight twisting motion.

NOTE: The bottom of the handle should be twisted in the direction the saw is to travel.



8. When you are near the end of the cut, take light strokes and support the end of the work to prevent it from splitting.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
CUTTING WITH A BACKSAW	
1. Grasp the handle of the backsaw in the right hand in the same manner as with any other handsaw.	
2. Place a scrap board or bench hook under the material being cut.	
3. Hold the material with the left hand allowing the thumb to act as a guide to start the cut.	NOTE: A piece of stock with a squared edge or end may be clamped in place along the layout line. This acts as an excellent guide for a backsaw.
4. Start the cut by raising the handle of the saw slightly and cutting on the far side.	
5. Gradually lower the handle until the cutting edge is parallel with the surface of the stock.	
6. Continue the cut using long horizontal strokes, keeping the saw in the full length of the kerf.	NOTE: Keep the saw positioned in the kerf so that the face of the blade is square with the surface of the material being cut.
7. Finish the cut.	

OPERATION SHEET
SC-2-13

COMPETENCY: Install Drill Bit in Drill Motor Chuck and Drilling Holes

COURSE: Painting and Decorating UNIT II: Small Tools

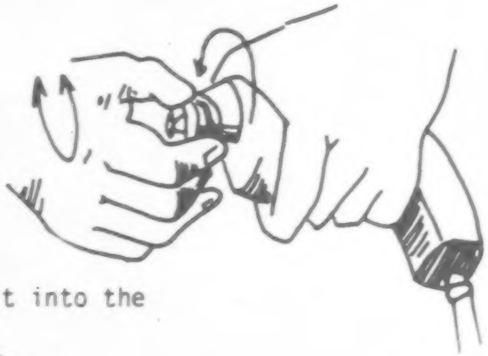
OBJECTIVE: The student will be able to install drill bit - acceptable to safety standards, and drill holes acceptable to the shop standards pre-set by the instructor

Page 1 of 3 pages

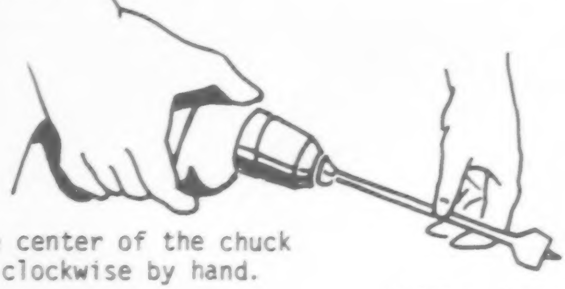
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

CAUTION: Do not have the drill plugged into the outlet while putting in the bit.

1. Open the chuck by turning it counterclockwise with the fingers, until the drill bit will slide into it.

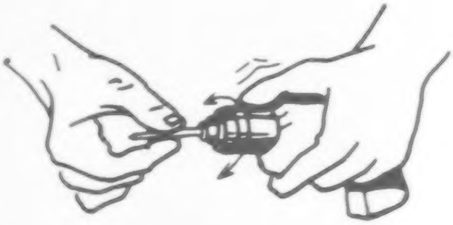


2. Push the blunt end of the bit into the chuck until it bottoms.



3. Hold the bit in the center of the chuck and turn the chuck clockwise by hand.

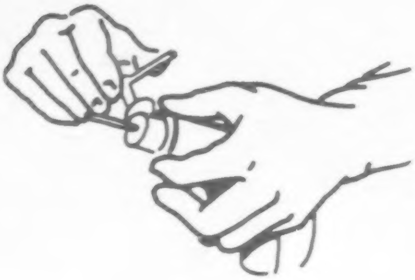
NOTE: Make sure the bit is centered in the chuck.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES

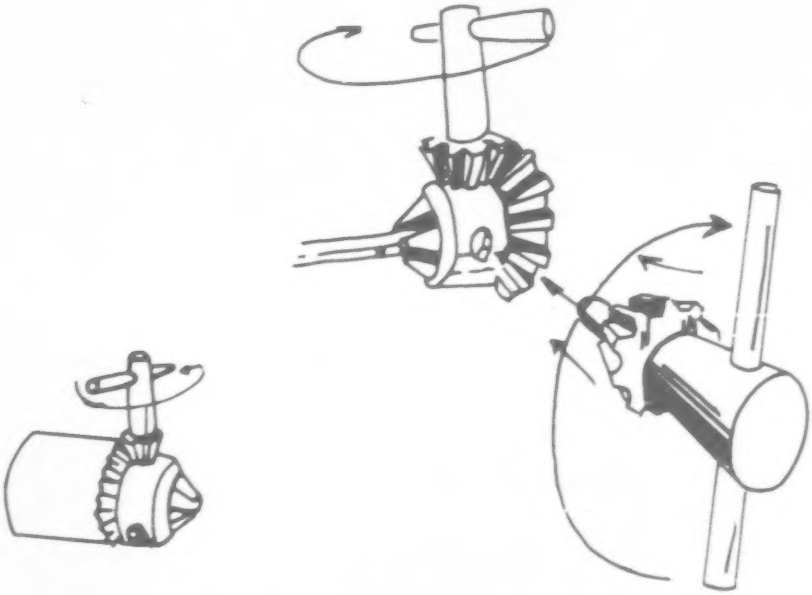
4. Tighten the chuck by turning the chuck key clockwise until it is tight.

5. Move to each key guide and tighten.

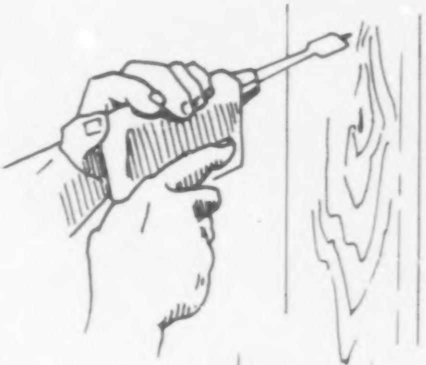


NOTE: Remove the key before using the drill.

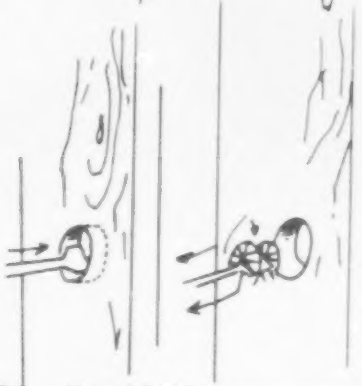
6. Plug the drill into an outlet and squeeze the trigger until the drill starts.



6. Center the bit on the stud and applying pressure on the drill, keep the bit perpendicular to the stud and keep a good tight grip on the drill motor with both hands.

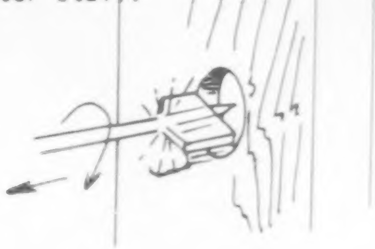


7. Squeeze the trigger, keep pushing gently, and continue pushing until the bit is all the way through the stud.



NOTE: Too little pressure will make the drill bit cut too slowly. Too much pressure will make the motor stall.

8. Keep the drill motor running and perpendicular to the stud and keeping a good tight grip on the motor, use both hands to pull the motor back.



NOTE: This makes the bit easy to take out of the hole and it cleans out the wood chips in the hole.

OPERATION SHEET
SC-2-14

COMPETENCY: Drill Holes with an Automatic Push Drill

COURSE: Painting and Decorating UNIT II: Small Tools

OBJECTIVE: The student will be able to gain skill in the use of the automatic push drill

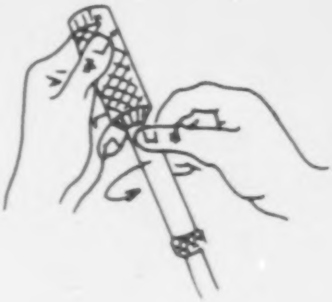
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS
The student will be able to:

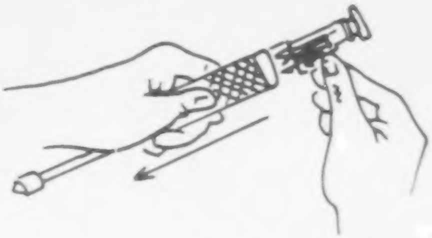
TEACHING/LEARNING ACTIVITIES

INSTALL DRILL POINTS:

1. Open the magazine by holding the handle and turning the lockring to the left.

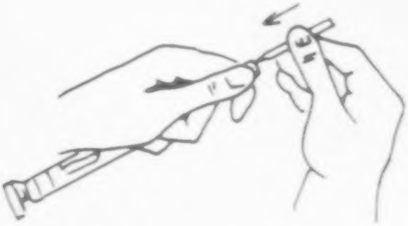


2. Pull the magazine handle down and take out a drill point.



3. Slide the magazine back in place and lock it by turning the lockring to the right.

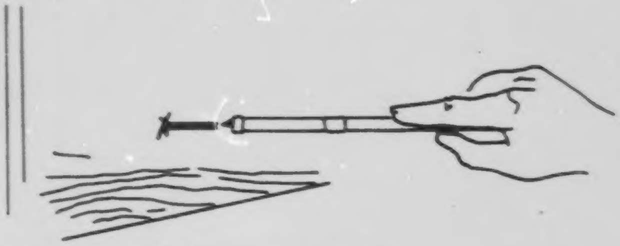
4. Push the chuck sleeve forward, put in the drill point and turn it until it is seated.



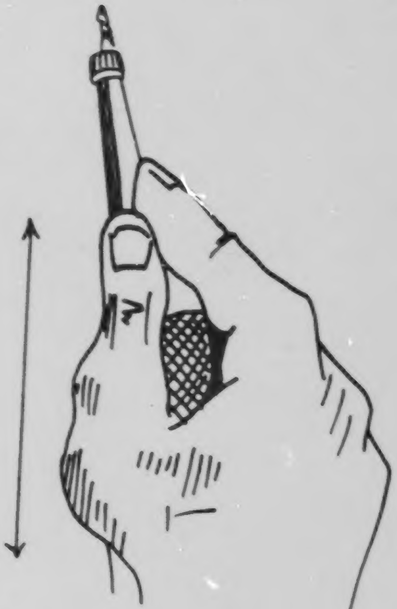
5. Release the chuck sleeve.

DRILL THE HOLE:

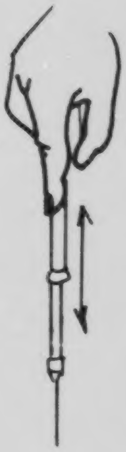
1. Put the drill point in position to drill the hole.



2. Begin to drill by applying pressure to the handle parallel to the drill point.



3. Use a push-pull motion to drill the hole.



4. Remove the drill by pulling it straight out of the hole.

OPERATION SHEET
SC-2-15

COMPETENCY: Bore Holes with Brace and Auger Bit

COURSE: Painting and Decorating

UNIT II: Small Tools

OBJECTIVE: The student will be able to be competent in boring holes with a brace and bit

Page 1 or 1 page

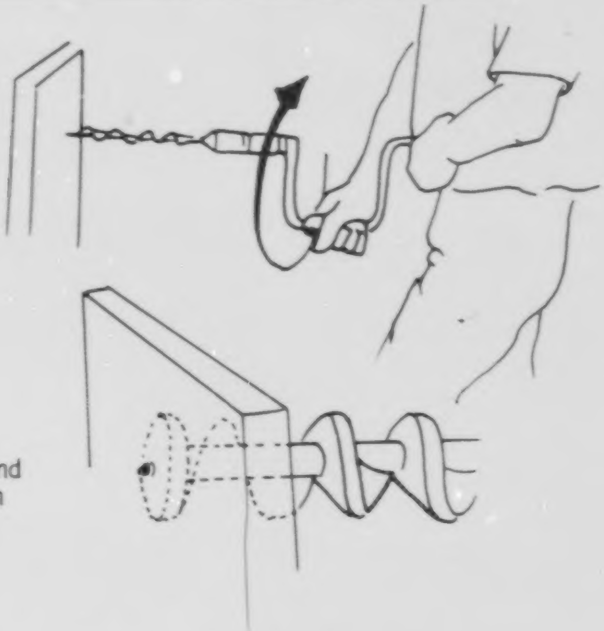
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place the proper size auger bit in the chuck and tighten.
2. Bore in the horizontal position:
   A. Hold the head of brace cupped in the left hand and supported against the stomach.

   B. Grasp the handle with the right hand.

   C. Turn the handle in a clockwise direction while applying forward pressure.

   D. Bore through without splintering, and stop when the screw point is through the work so as to finish from the opposite side.



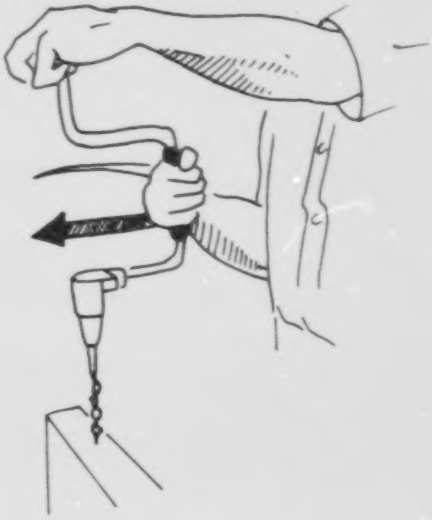
3. Bore a vertical hole:

   A. Align the bit in the direction the hole is to be drilled.

   B. Cup the head of the brace in the left hand.

   C. Apply downward pressure while turning the handle in a clockwise direction.

NOTE: Test for direction of drilling by comparing the direction of the bit to the nearest straightedge, the edge of the vise, or to a try square held near the bit.



OPERATION SHEET
SC-2-16

COMPETENCY: Use an Expansion Bit

COURSE: Painting and Decorating

UNIT II: Small Tools

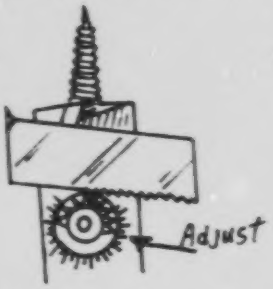
OBJECTIVE: The student will be able to properly set expansion bit to desired dimension

Page 1 of 1 page

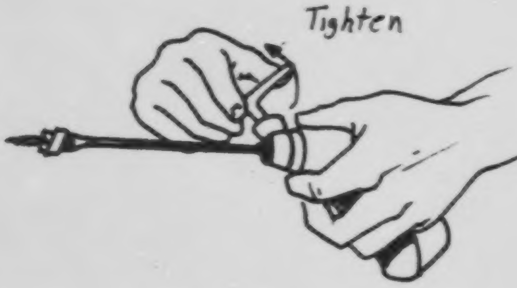
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Loosen adjustment screw at base of drill bit which holds expanding cutting end.

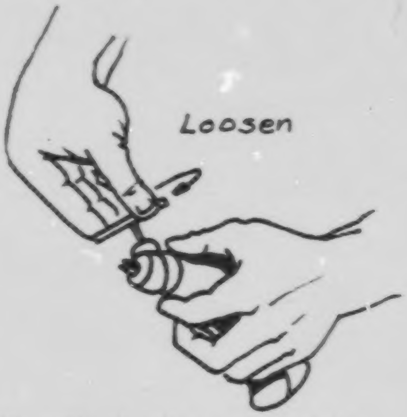
2. Using adjustment knob which is graduated, adjust bit to desired radius.



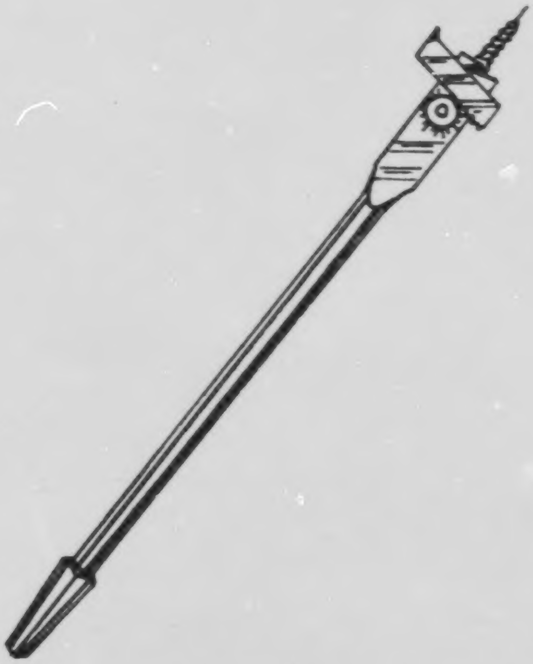
3. Tighten screw which holds expanding cutter.



4. Recheck dimension.



NOTE: Check dimension with rule.



OPERATION SHEET
SC-2-17

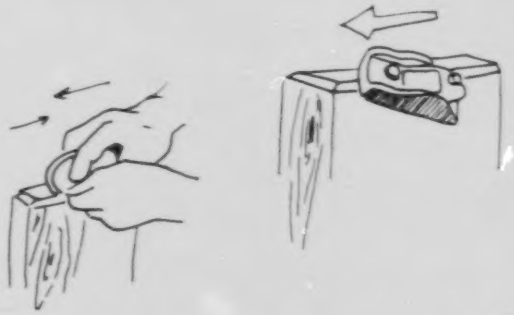
COMPETENCY: Chamfer and Bevel with Hand Plane

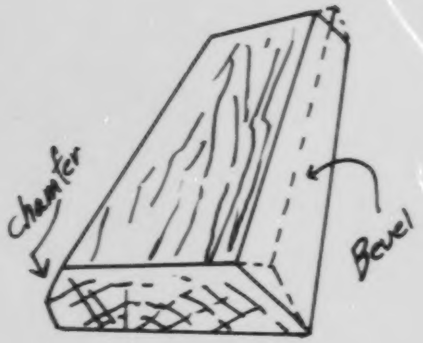
COURSE: Painting and Decorating | **UNIT II:** Small Tools

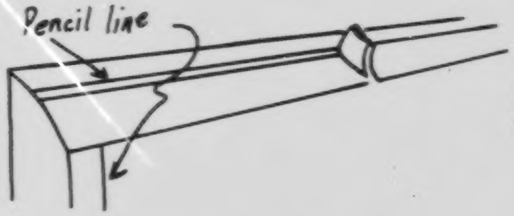
OBJECTIVE: The student will be able to accurately plane a chamfer and bevel on stock to meet specifications

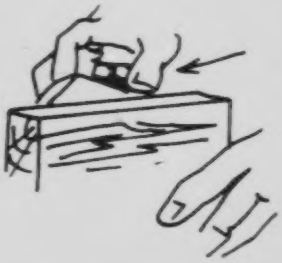
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Select a plane suited to the job.	
2. Lay out lines indicating the size of the chamfer or bevel.	
3. Clamp the material in a bench vise.	
4. Adjust the plane to take a rather heavy beginning cut and readjust to take thinner cuts when close to the layout lines.	
5. Chamfer the edges of the stock first so as to chamfer the ends without danger of splitting.	NOTE: Keep blades sharp. Check material for nails or obstructions.









NOTE: When chamfering or beveling end grain, hold the plane at a slight angle to the direction of the cut.

OPERATION SHEET
SC-2-17A

COMPETENCY: Plane the End of Stock with a Hand Plane

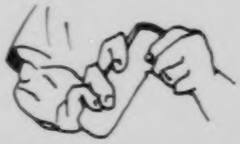
COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to properly plane the end of stock smooth with a hand plane

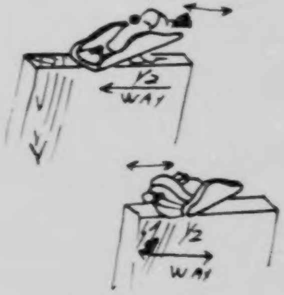
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Set the plane to take a fine cut.
2. Rest the palm of the hand on the upper part of the plane and holding the sides of the plane with thumb and second finger, place the index finger in the finger rest at the front of the plane.



3. Hold the side of the plane at a slight angle with the face of the board and take a light, quick stroke.
4. Plane the end grain only to the center of the stock and then reverse the direction of planning.



OPERATION SHEET
SC-2-18

COMPETENCY: Plane the Edge of Stock with a Hand Plane

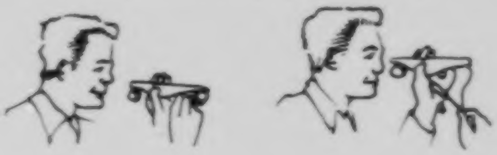
COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to plane the edge of stock clean and smooth with a hand plane

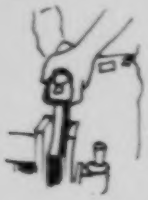
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

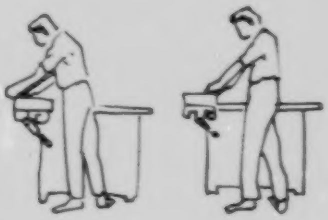
1. Adjust the plane for a trial cut.



2. Stand firmly but comfortably behind the work.
3. Use one hand to hold the plane square and parallel with the face of the work.



4. Make planing strokes, by pressing down on the knob at the beginning of the stroke and by pressing on the handle at the end of the stroke.
5. Keep a downward and forward motion to make the cut across the edge.
6. Shift body weight to the left foot as the cut is being made.



OPERATION SHEET
SC-2-18A

COMPETENCY: Plane the Face of Stock with a Smoothing Plane

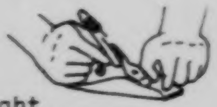
COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to plane the face of stock smooth with a hand plane

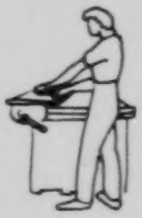
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

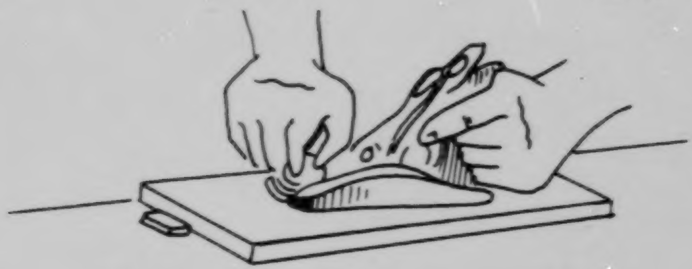
1. Clamp the board end to end or butt it against a stop strip.
2. Hold the plane with one hand on the handle and the other on the knob.



3. Stand in an easy but firm position right behind the work.



4. Push down firmly on the knob of the plane when beginning the stroke, and on the handle when finishing it.
5. Take enough strokes to remove the high spots and flatten the board.
6. Retest the board for flatness. Repeat steps 2 to 6 until the board is flat.

COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
7. Plane the whole surface with diagonal strokes. 	NOTE: If the plane cuts the surface the whole length of each stroke, the surface is fairly flat.
8. Smooth the surface by lightly planing along the length of the board.	

OPERATION SHEET
SC-2-19

COMPETENCY: Drive and Remove Screws with the Blade Screwdriver

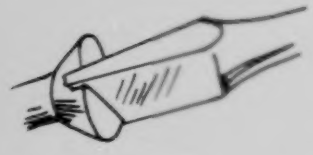
COURSE: Painting and Decorating   **UNIT II:** Small Tools

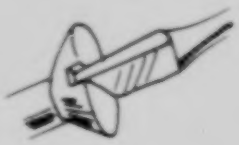
OBJECTIVE: The student will be able to install wood screws accurately without damaging the wood surface

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

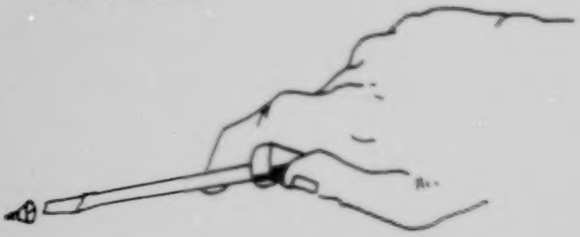
1. Select a screwdriver fitted to the work.



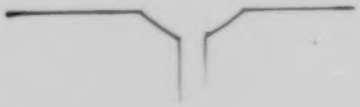


NOTE: Screwdriver must fit the screwhead or damage will result. If the screwdriver is too small, it could be broken or the screw could be ruined. If the screwdriver is too big, the wood may be marred or the screw broken.

2. Hold the handle firmly in the palm with the thumb and forefinger extended along the handle.

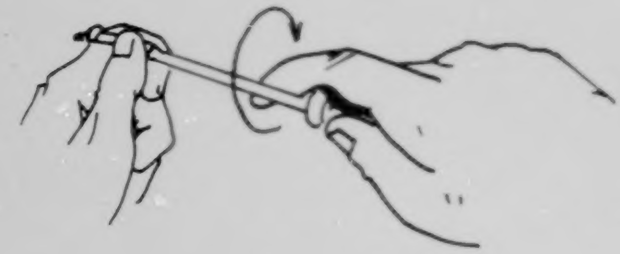


NOTE: Pilot holes should be drilled and countersunk to receive the screw head. This may be done with the appropriate sized drill bit.



3. Apply forward pressure while turning the screwdriver clockwise.

NOTE: The left hand should be used to steady the tip of the screwdriver and to hold the tip in the slot when taking a new grip on the handle.



4. Drive screws to their full depth, being careful not to mar the screwhead or the work.

NOTE: In hardwood, beeswax may be applied to the thread of the screw to make them easier to drive.

OPERATION SHEET
SC-2-19A

COMPETENCY: Adjust, Tighten, Drive, and Remove Screws with a Phillips Head Screwdriver

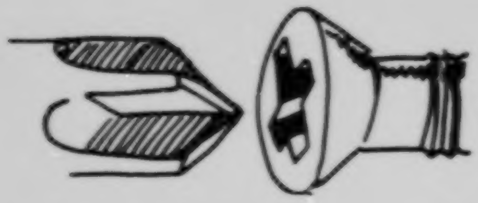
COURSE: Painting and Decorating

UNIT II: Small Tools

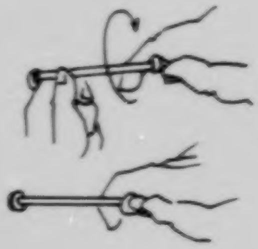
OBJECTIVE: The student will be able to remove or replace screws with phillips head screwdriver

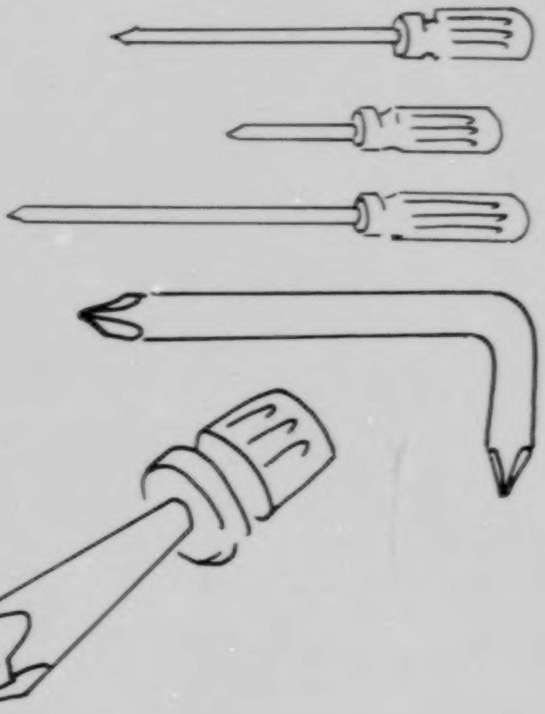
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place tip of phillips screwdriver into slotted screw - firmly - squarely.	NOTE: Be sure to hold the screwdriver straight; if the tip slips out of the slots, the screw will be damaged and serious injury is possible.



2. Twist phillips screwdriver to the left to remove fastener, and to the right to tighten the fastener.	NOTE: Phillips head screwdrivers come in a wide variety of sizes.





3. Continue turning until the fastener is completely tightened or removed.

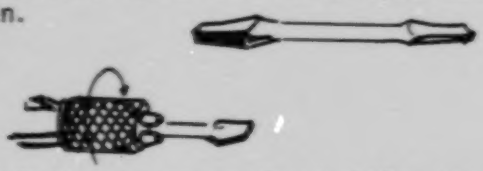
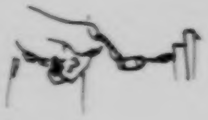
OPERATION SHEET
SC-2-20

COMPETENCY: Drive and Remove Screws with a Brace and Driver Blade

COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to install or remove screws efficiently

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Insert driver blade into brace chuck and tighten. 	
2. Place blade into screw slot holding brace as shown. 	
3. Firmly turn the brace handle clockwise until screw has completely seated.	
4. To remove the screw reverse the process.	NOTE: The brace is used primarily to drive and remove large screws.

OPERATION SHEET
SC-2-21

COMPETENCY: Drive or Remove Screws with a Spiral Screwdriver

COURSE: Painting and Decorating UNIT II: Small Tools

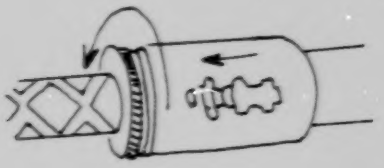
OBJECTIVE: The student will be able to properly and safely use the spiral screwdriver

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Pull back on the chuck sleeve, drop the bit in place, and release the chuck sleeve.

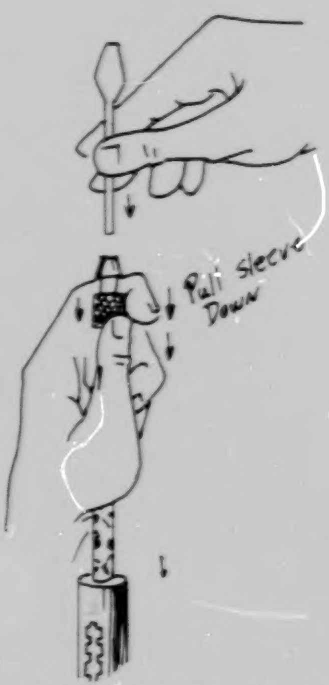
2. Drive a screw, by putting the direction lever in the "F" or forward position.



3. Cup the handle in one hand while guiding the blade into the screw slot with the other hand.

4. Hold the blade on the head of the screw while pulling the handle back.

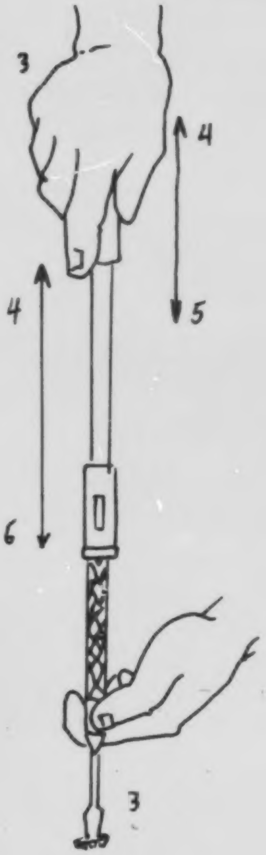
5. Push the handle forward quickly, guiding the blade.



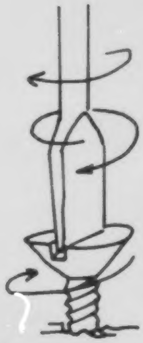
NOTE: To release the lock ring, turn it.

CAUTION: DO NOT put any part of hand on the spiral grooves behind the clutch sleeve. One could get hand pinched.

COMPETENCE - PROCEDURES/STEPS | TEACHING/LEARNING ACTIVITIES



6. Repeat steps 4 and 5 until the screw is almost all the way into the wood.



7. Finish driving the screw, by pushing the handle forward and turning the lock ring to lock it.

8. Continue, using it like an ordinary screwdriver.

NOTE: Steps 7 and 8 also are used to begin removing a screw.

OPERATION SHEET
SC-2-22

COMPETENCY: Sharpen a Cabinet Scraper

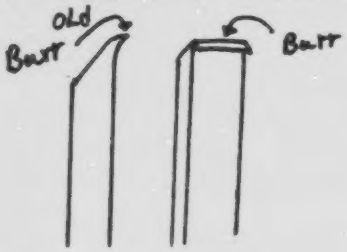
COURSE: Painting and Decorating — **UNIT II:** Small Tools

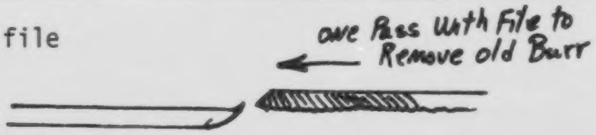
OBJECTIVE: The student will be able to obtain proper burr for scraping with scraper

Page 1 of 1 page

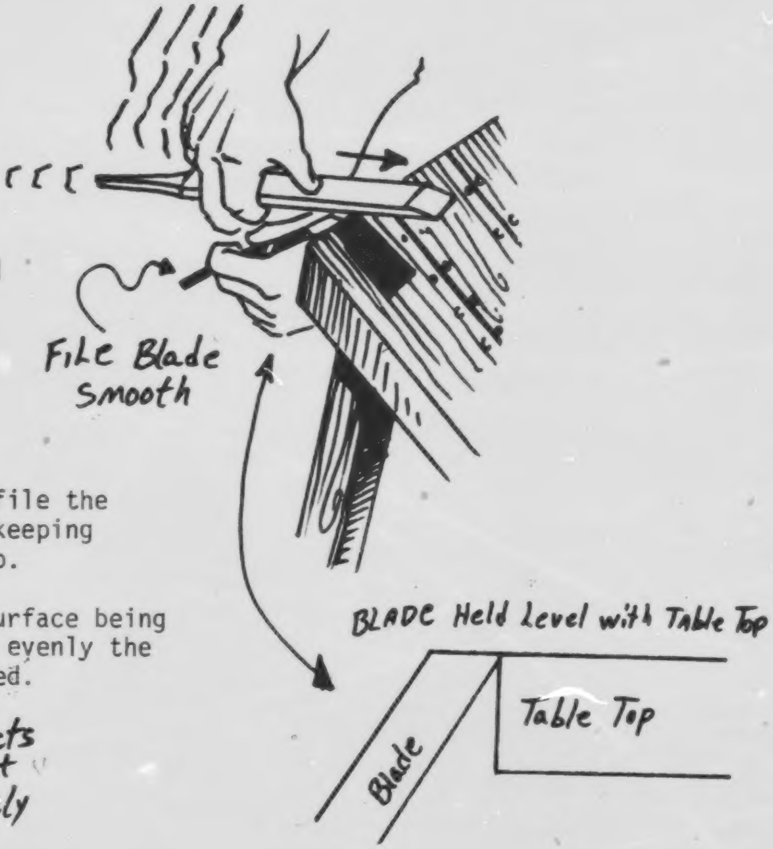
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Remove old burr with scraper file by making one quick pass.


Old Burr
Burr

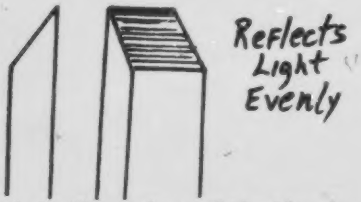

one Pass with File to Remove old Burr

2. Place scraper blade against table top and hold it so the cutting portion of blade is level with top.


File Blade Smooth
BLADE Held level with Table Top
Table Top
Blade

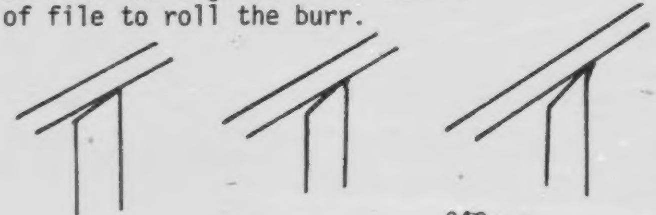
3. Start to the right, and file the blade with even strokes keeping file level with table top.

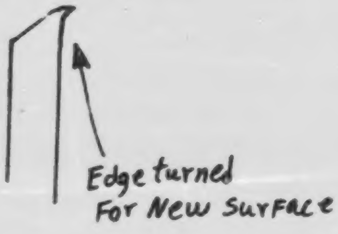
NOTE: When the entire surface being sharpened reflects light evenly the filing process is finished.


Reflects Light Evenly

4. Burnish the edge with the handle of file to roll the burr.

NOTE: This burr is what is used to scrape with.




Edge turned For New Surface

OPERATION SHEET
SC-2-23

COMPETENCY: Remove Runs or Scratches with Cabinet Scraper

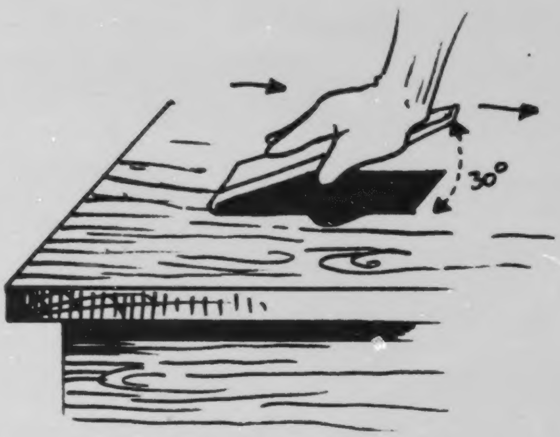
COURSE: Painting and Decorating

UNIT II: Small Tools

OBJECTIVE: The student will be able to effectively remove runs or scratches in wood with the cabinet scraper

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold scraper at 30° to surface and pull in to oneself using the burr to cut with. 2. Repeat this scraping operation until run area is level with surrounding area.	



NOTE: Use very light pressure. If material being scraped does not peel, stop immediately.

OPERATION SHEET
SC-2-24

COMPETENCY: Sharpen Hook Blade Scraper

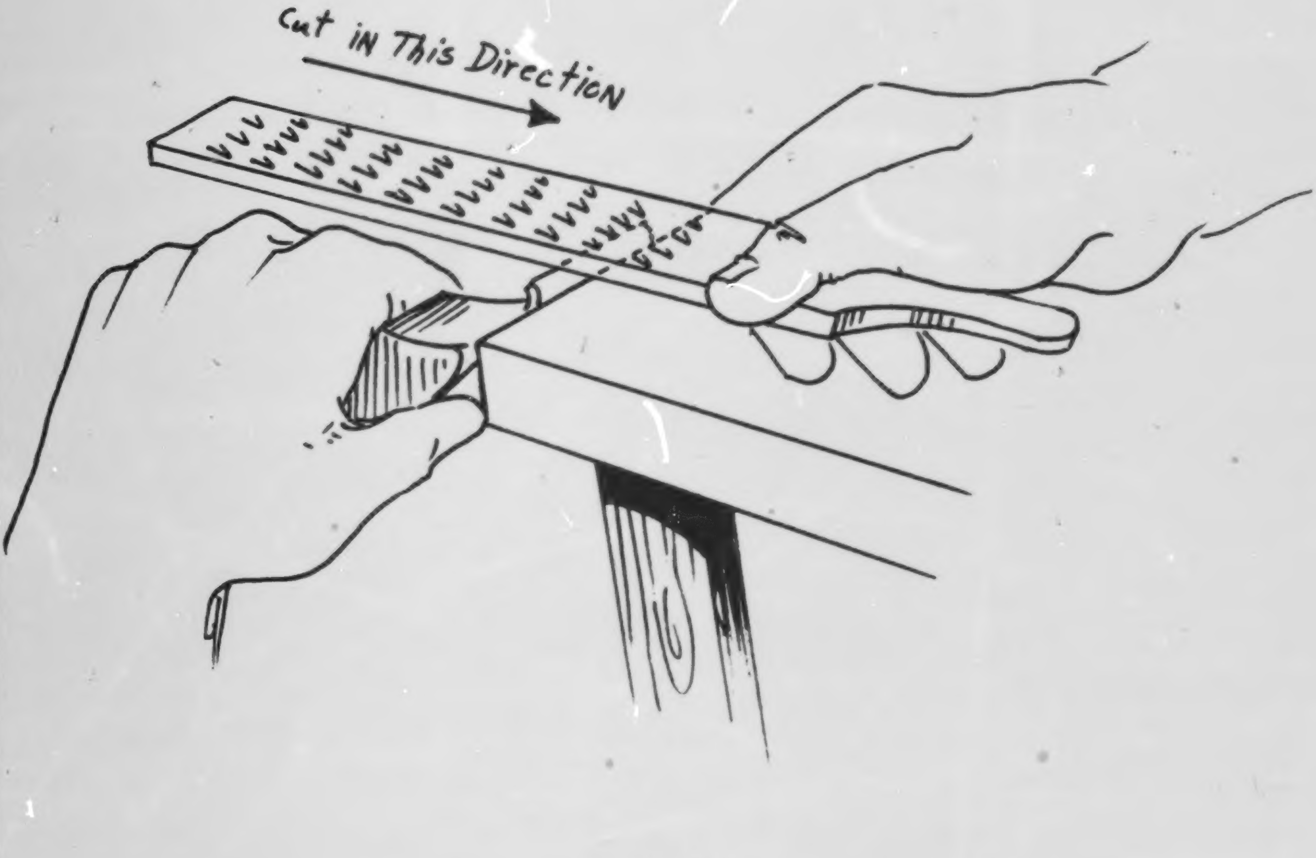
COURSE: Painting and Decorating

UNIT II: Small Tools

OBJECTIVE: The student will be able to sharpen a hook scraper so that it will easily remove paint from a surface

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place scraper against edge of table so cutting is parallel to table top and left hand.	
2. Hold the scraper file in the right hand and move it parallel to table top across the scraper blade.	NOTE: When the filed scraper blade surface reflects light evenly to all edges, test for sharpness.



OPERATION SHEET
SC-2-25

COMPETENCY: Smooth Wood with a Hooked Scraper

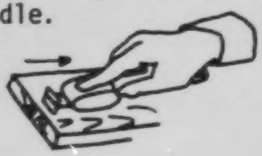
COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to use hook blade scraper efficiently

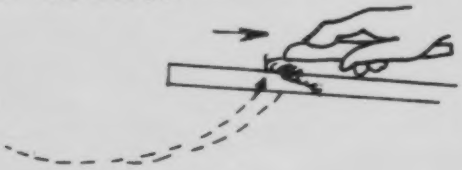
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold the handle of the scraper in one hand with the index finger extended on top of the handle.



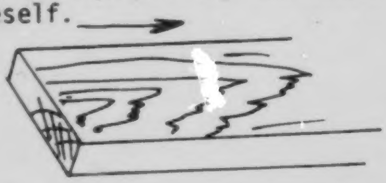
2. Hold the scraper on the wood with the handle raised just enough to have the formed part of the handle clear the surface of the stock.



3. Start near the far end of the board.

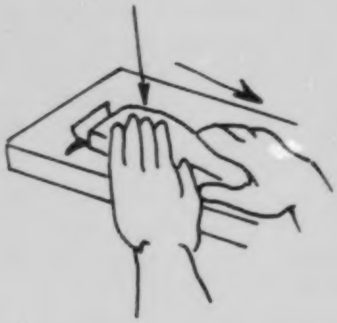
4. Apply pressure to the blade with the index finger while pulling the blade in toward oneself.

NOTE: Scrape with the grain.



5. Apply steady, uniform pressure and use long, steady strokes.

COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
6. Lift the scraper on the return stroke to avoid dulling the blade.	NOTE: When much material needs to be removed, hold the handle in one hand and apply pressure to the scraper with the palm of the other hand.



OPERATION SHEET
SC-2-26

COMPETENCY: Cut Materials with a Hack Saw

COURSE: Painting and Decorating

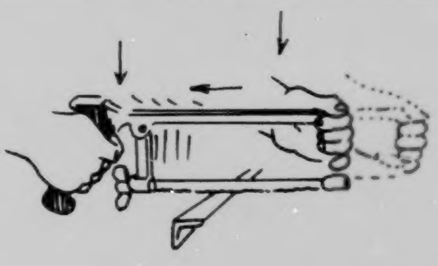
UNIT II: Small Tools

OBJECTIVE: The student will be able to use hack saw properly and safely to cut materials

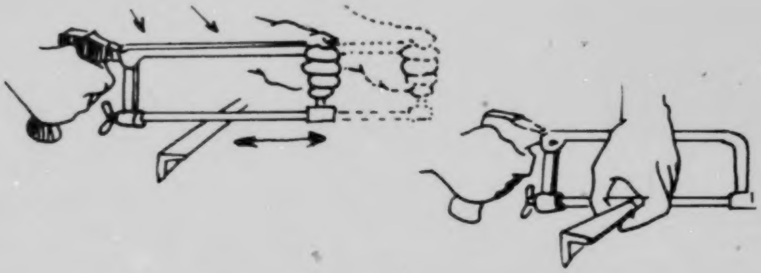
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold saw as shown.



2. Start cut by lightly pulling saw back.
3. Push saw forward firmly.
4. Pull saw back lightly.
5. Continue until cut is complete.
6. Near end of cut, ease up on forward pressure and slow down to avoid slipping and injury.



OPERATION SHEET
SC-2-27

COMPETENCY: Scribe Arcs with Dividers or Compass

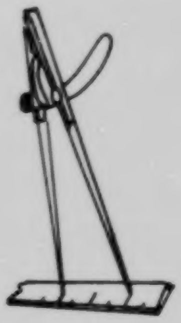
COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to accurately swing an arc

Page 1 of 1 page

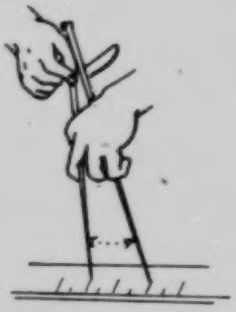
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Set the dividers by holding them in one hand and placing the point of one leg on the 1" mark of the rule and adjusting the other leg of the dividers until it rests on the mark equal to the radius needed plus 1".

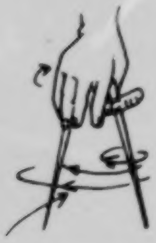


2. Hold the dividers between the fingers and the thumb.

3. Place the point of one leg on the center mark and press on it hard enough to hold the point in place.



4. Swing the other leg of the dividers clockwise, and push down on it to scribe an arc or circle.



OPERATION SHEET
SC-2-28

COMPETENCY: Cut Curves with a Compass Saw

COURSE: Painting and Decorating

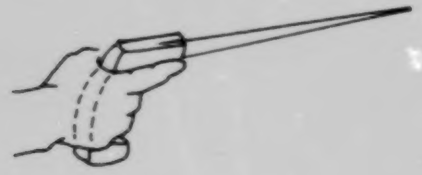
UNIT II: Small Tools

OBJECTIVE: The student will be able to cut curves with the compass saw

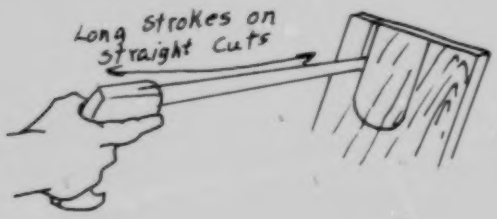
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold the saw as the other hand saws--having index finger extended along the handle.

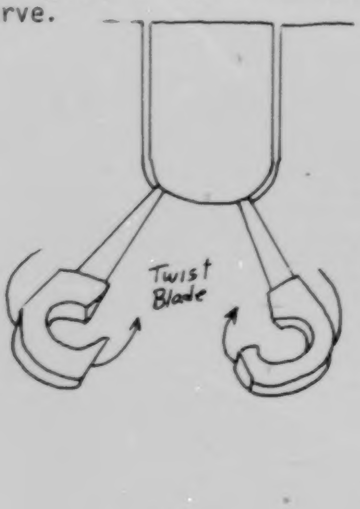


2. Hold the saw blade perpendicular to the work.


Long strokes on straight Cuts

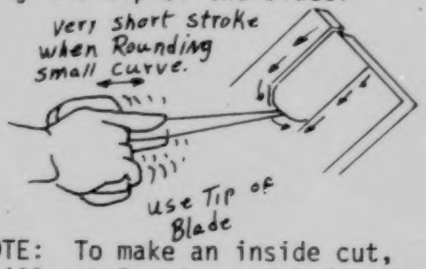
3. Saw with short, choppy strokes.

4. Follow a curved line, twisting the blade slightly in the direction of the curve.


Twist Blade

NOTE: Don't force the saw. Forcing could make it buckle or break.

NOTE: For small curves, use only the tip of the blade.


very short stroke when Rounding small curve.
use Tip of Blade

NOTE: To make an inside cut, drill a hole big enough for the saw blade to pass through in the area to be cut out. Use the hole as a starting point to cut out the rest of the pattern.

OPERATION SHEET
SC-2-29

COMPETENCY: Hold Material with Hand Spring Clamps

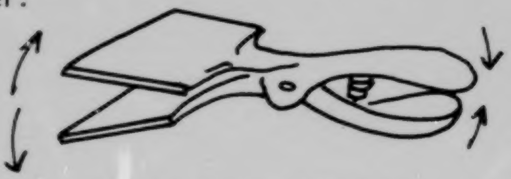
COURSE: Painting and Decorating UNIT II: Small Tools

OBJECTIVE: The student will be able to properly secure material with hand clamps

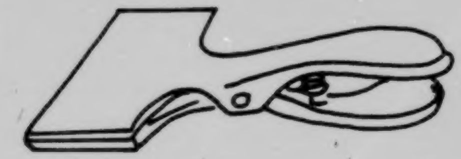
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

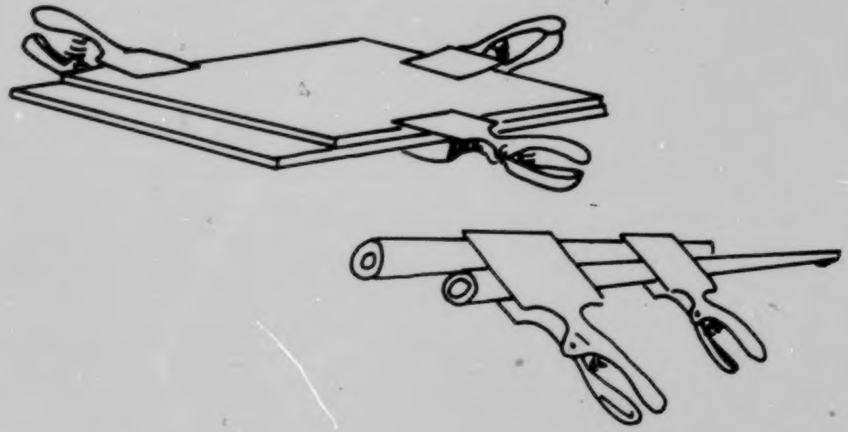
1. Properly position material to be clamped.
2. Open hand clamps by squeezing handles together.



3. Place jaws over work and release handles to secure the material to be held.



4. Space hand clamps so that material will be held firmly in place.



OPERATION SHEET
SC-2-30

COMPETENCY: Spread Glue

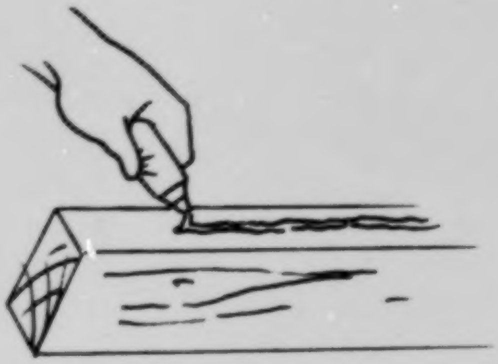
COURSE: Painting and Decorating   **UNIT II:** Small Tools

OBJECTIVE: The student will be able to glue materials neatly

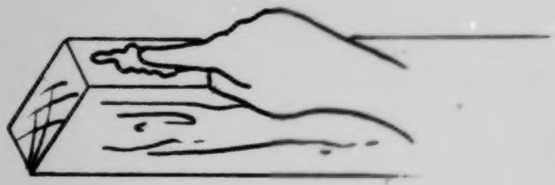
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Squeeze glue from bottle along edge of board.

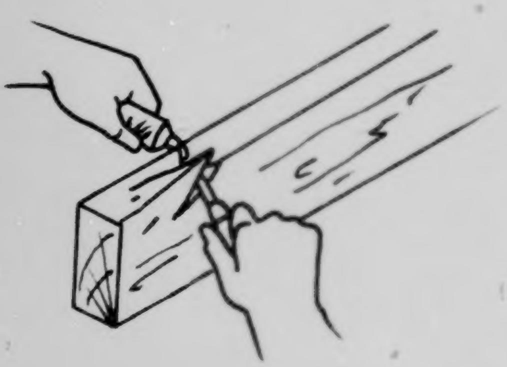


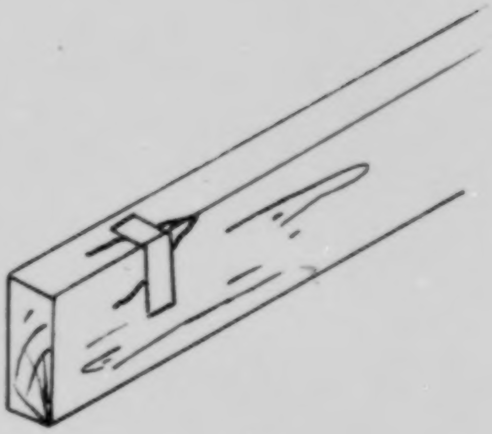
2. Spread glue with finger.



3. Clamp with appropriate clamps.

4. Lift splits with point of pen knife, put glue under and hold down with masking tape.



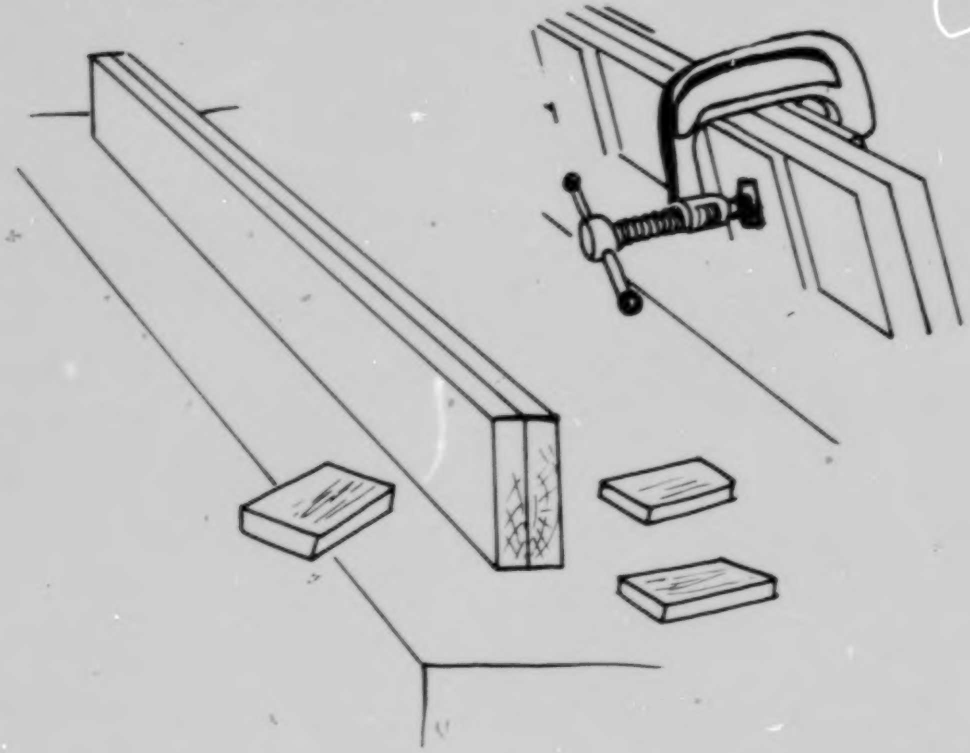


OPERATION SHEET
SC-2-31

COMPETENCY: Use C-Clamp

COURSE:	Painting and Decorating	UNIT II: Small Tools
OBJECTIVE:	The student will be able to use C-clamps to hold objects securely in place	Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
CLAMP NARROW STOCK--UP TO 6" WIDE--FACE TO FACE WITH C-CLAMPS:	
1. Cut pieces of scrap lumber (3/4" thick or thicker) into lengths equal to the width of the stock to be clamped.	
2. Place the pieces to be clamped in position on a table.	



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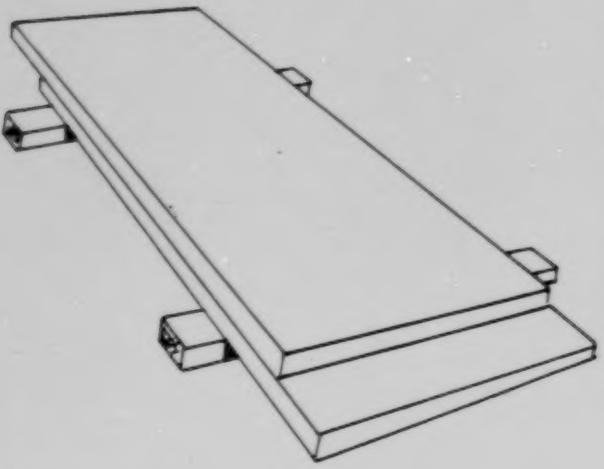
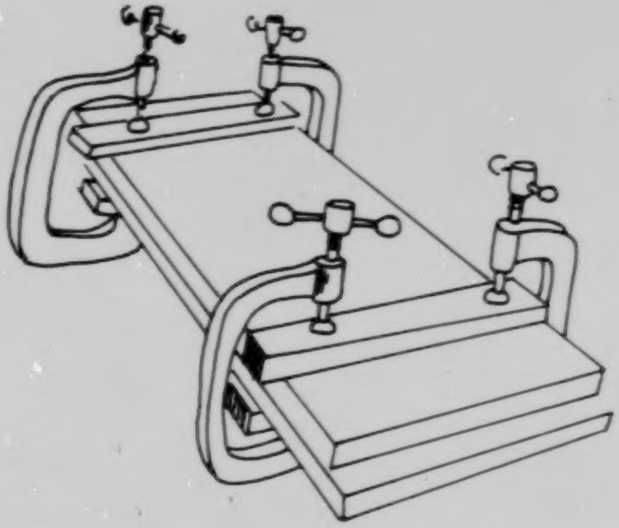
COMPETENCE - PROCEDURES/STEPS

TEACHING/LEARNING ACTIVITIES

3. Put the scrap pieces in place and adjust the C-clamp to the total thickness of stock plus scrap pieces.
4. Center the clamp on the stock and tighten the screw.

NOTE: Thin stock will need more clamps. Stock less than 1/2" thick may need to be clamped every 6" to 8". 2" material may need clamped only every 16".





CLAMP WIDE STOCK FACE TO FACE:

1. Cut pieces of 2" x 4" a little longer than the stock is wide.
2. Place the pieces of 2" x 4" on both sides of the pieces being clamped.
3. Clamp the ends of the 2" x 4"'s either C-clamps or bar clamps.

NOTE: This procedure can also be used to hold lumber flat while it is being clamped edge to edge.

OPERATION SHEET
SC-2-32

COMPETENCY: Clamp Wide Pieces of Stock with Bar Clamps

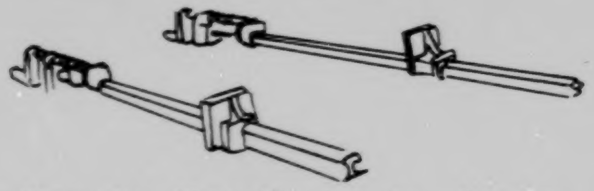
COURSE: Painting and Decorating UNIT II: Small Tools

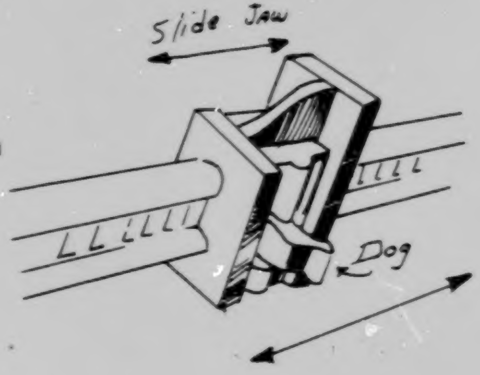
OBJECTIVE: The student will be able to clamp boards edge to edge using bar clamp

Page 1 of 1 page

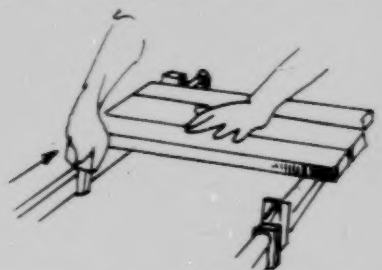
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Put the clamps on the metal-topped gluing bench with the jaws up and the handles over the edge of the bench.



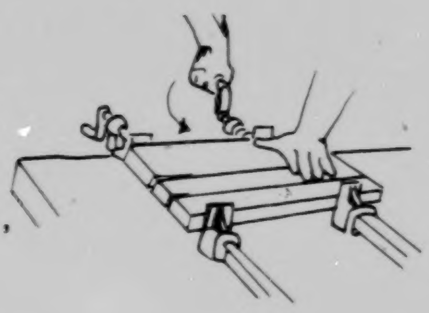


2. Move the adjustable jaws by releasing the dogs and sliding them into position for the material to be clamped.

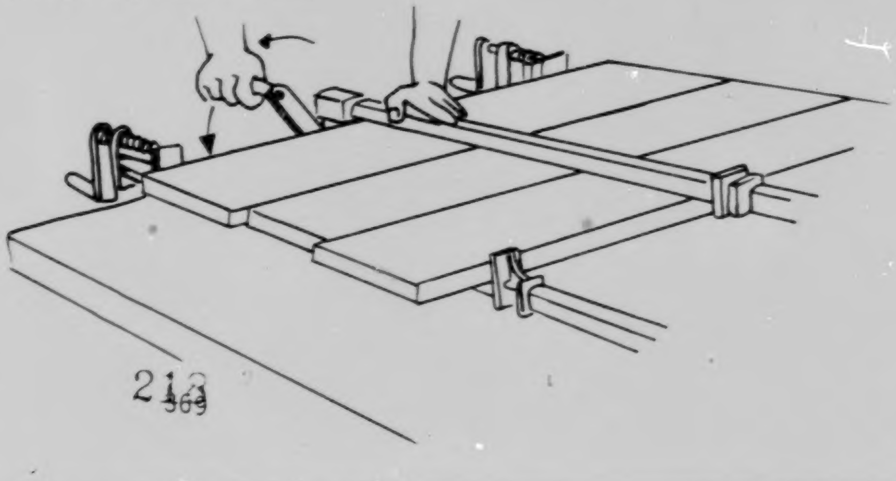


3. Lay the material to be clamped on the bar, between the jaws and use protective blocks to keep the jaws from damaging the finished stock.

4. Tighten the clamps by turning the handles, wheels or cranks.



5. Clamp stock that is more than 16" long by alternating the clamps top and bottom:



OPERATION SHEET
SC-2-33

COMPETENCY: Clamp Pieces of Stock Face to Face

COURSE: Painting and Decorating **UNIT II:** Small Tools

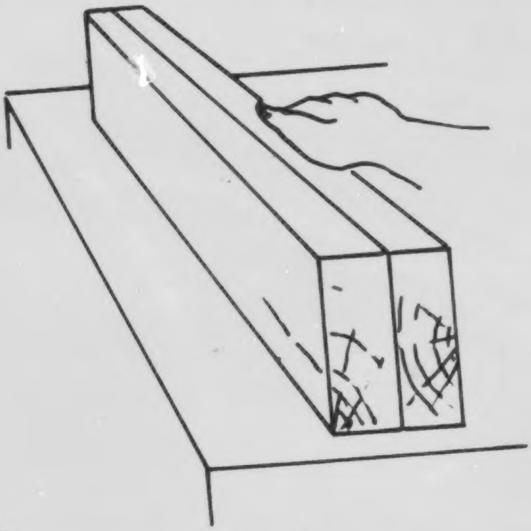
OBJECTIVE: The student will be able to correctly clamp pieces of stock face to face so that they are straight and even

Page 1 of 2 pages

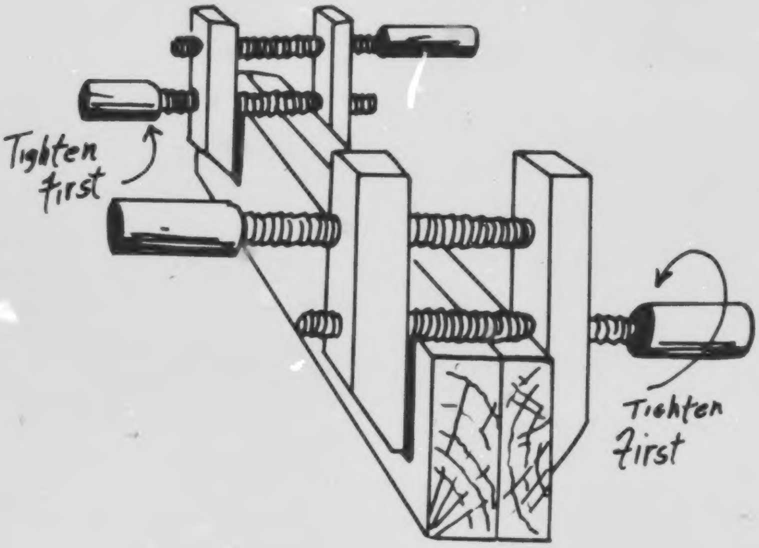
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

USE PARALLEL HAND SCREWS:

1. Place the stock on the bench or glue table.



2. Put the hand screws in position on the stock and tighten the screw nearest the stock until the jaws are clamped firmly.



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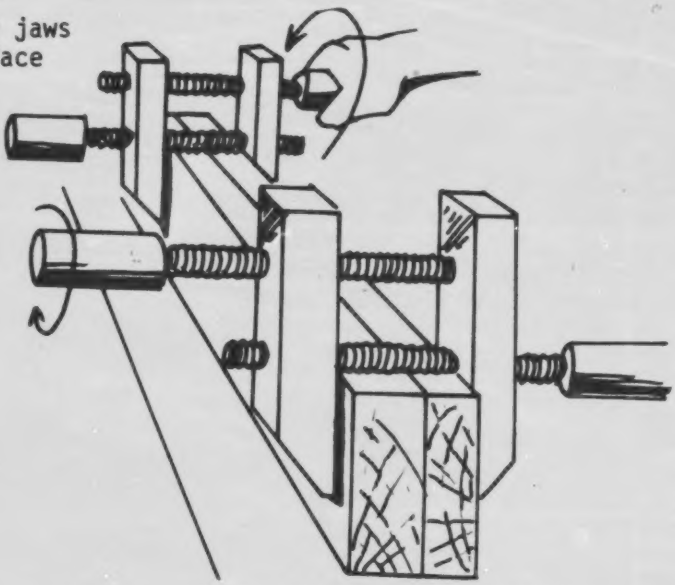
3. Adjust the outside screw until the jaws of the clamp are parallel to the face of the stock.



4. Tighten both screws until the pieces of stock are held together tightly along the whole length of the jaws.

NOTE: Stock which is wider than the length of the hand screw jaws can be clamped by using extra clamps along the opposite edge. These would be placed between the clamps used on the first edge.

OPERATION SHEET
SC-2-34

COMPETENCY: Use the Portable Disc Sander

COURSE: Painting and Decorating UNIT II: Small Tools

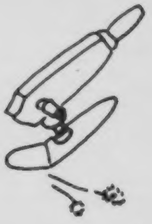
OBJECTIVE: The student will be able to safely sand with a portable sander avoiding excessive wear on sanding disc

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

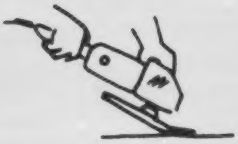
USE GRINDER ON FLAT SURFACE:

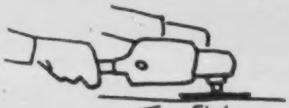
1. Hold it so that only the top or bottom 1 1/2 to 2" of the disc will touch the metal.



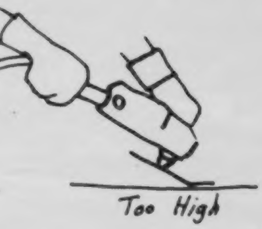
2. Hold the grinder so the side of the disc which is not touching the metal is at a 20° angle to the work.

NOTE: Do not push on the grinder.

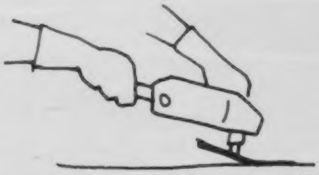




Too Flat



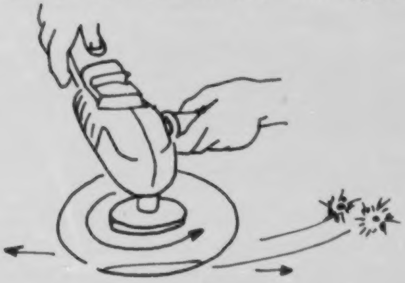
Too High

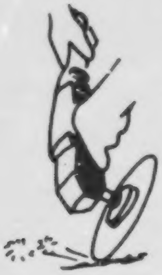


Correct 20°

3. Move the grinder back and forth, overlapping about half of each stroke.

NOTE: This leaves a criss cross pattern and shows the low spots.



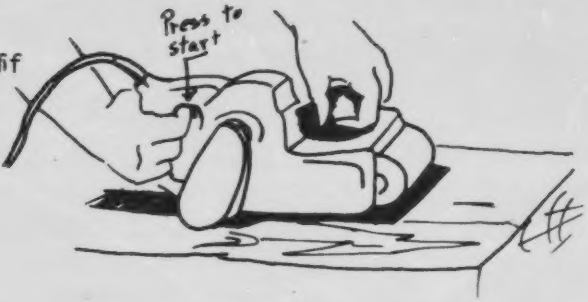
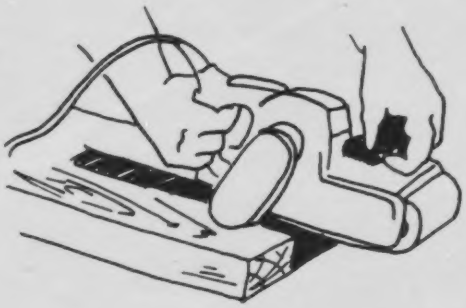
COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
USE GRINDER ON LOW AREAS: 1. Hold the disc at an 80° angle so the edge of the disc will cut into the low spots and welds to clean them out. 	NOTE: The disc grinder can be used to clean metal for brazing, soldering, and plastic filling. By tilting the grinder, it is possible to grind sharp, low areas clean. The grinder must be used carefully and correctly or too much metal may be ground away.

COMPETENCY: Use a Belt Sander

COURSE: Painting and Decorating | **UNIT II:** Small Tools

OBJECTIVE: The student will be able to sand stock accurately with a belt

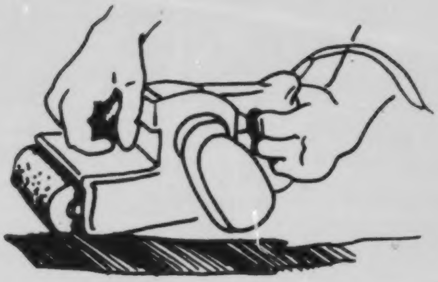
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Install sanding belt of desired coarseness.	NOTE: Check power cord for breaks.
2. Place the workpiece against a stop.	
3. Check to see that switch is in off position.	
4. Connect the sander to the power source and align the sanding belt to run in the center of the plate.	
5. Turn the motor off, and place the sander in position flat on the board with the belt running in the direction of the grain.	NOTE: The stop should be located to the rear of the sander.
6. Hold the sander handle with one hand and the guide knob with the other, slightly off the surface. 7. Start the motor by squeezing the trigger switch with the index finger, and as the switch is turned on move sander forward and down onto the surface.	
8. Guide the sander over the surface with overlapping strokes parallel to the grain. 9. Keep the sander flat and always moving.	 NOTE: When possible, sand the entire length of the board on each pass. When sanding near the end of a board, hold the sander level and keep it from sagging.

COMPETENCE - PROCEDURES/STEPS

11. Use successively finer grit belts until the desired finish is obtained.
12. Lift the sander from the work, release the switch and wait until the belt stops before letting the sander down.
13. Lay the sander on its side when not in use.

TEACHING/LEARNING ACTIVITIES



NOTE: The belt sanding operation should not be considered a finish sanding operation for fine finishing operations.

OPERATION SHEET
SC-2-36

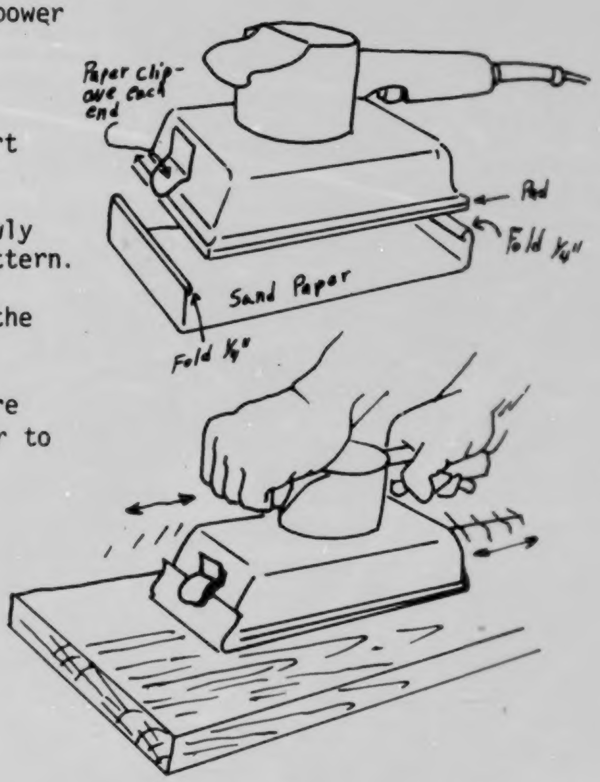
COMPETENCY: Use a Finishing Oscillating Sander

COURSE: Painting and Decorating UNIT II: Small Tools

OBJECTIVE: The student will be able to sand stock accurately with an oscillating sander

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Install a sanding sheet of the proper grit size to the sanding pad. NOTE: Be sure the switch is in the "OFF" position before connecting to the power source.	NOTE: Check power cord and plugs for defects.
2. Clamp the workpiece if necessary.	
3. Set the sander on the work and start the motor.	
4. Move the sander back and forth slowly over the work in an overlapping pattern.	
5. Use successively finer grit until the desired finish is obtained.	
6. Lift the sander from the work before stopping the motor, and allow motor to stop before setting it down.	



NOTE: When sanding for stain or natural finish be sure no circular scratches are present.

OPERATION SHEET
SC-2-37

COMPETENCY: Hold Nuts with Pliers

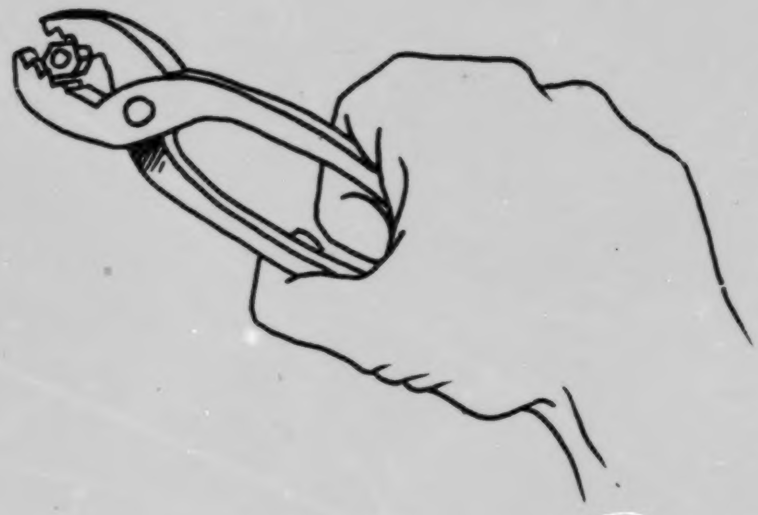
COURSE: Painting and Decorating

UNIT II: Small Tools

OBJECTIVE: The student will be able to use pliers to hold objects

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold nut with pliers.	
2. Tighten screw with appropriate screwdriver.	



OPERATION SHEET
SC-2-38

COMPETENCY: Cut Simple or Compound Miter with a Handsaw

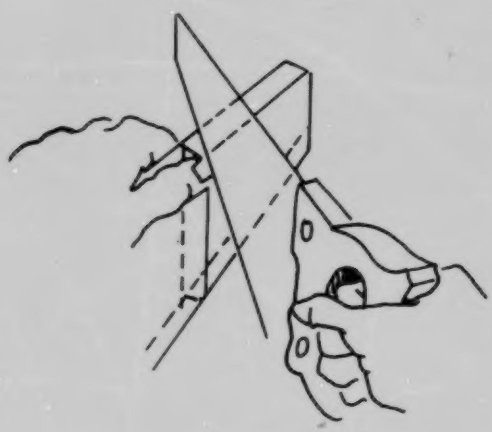
COURSE: Painting and Decorating UNIT II: Small Tools

OBJECTIVE: The student will be able to cut accurate angles using a handsaw

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Clamp the piece to be cut in a bench vise, edge up, so that the mark across the face of the board is in a vertical position.

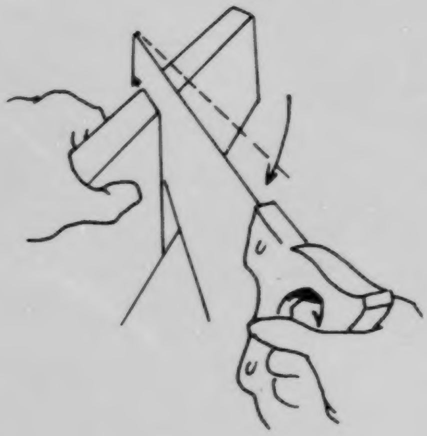


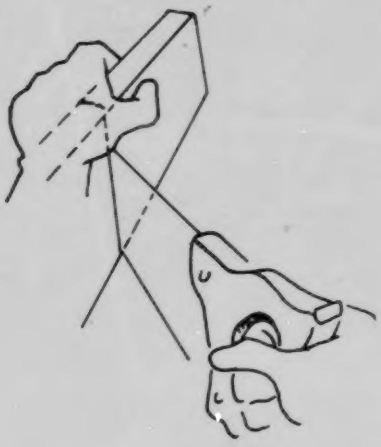
2. Start the saw along the guide line on the waste side of the line taking the first few strokes across the entire width of the piece while sighting along both layout lines.

3. Cut about ½" into the piece, then lower the handle of the saw slightly below the tip, making it easier to follow the line.

4. Level the saw and support the waste to prevent splitting at the end of the cut.

NOTE: Sawing should be from the face of the board and away from the bench, if possible.





OPERATION SHEET
SC-2-39

COMPETENCY: Clamp Miters (Miter Clamps)

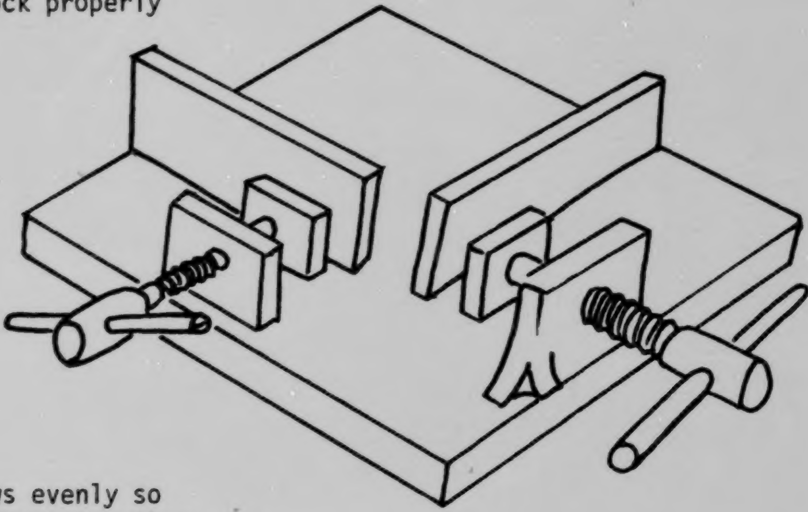
COURSE: Painting and Decorating

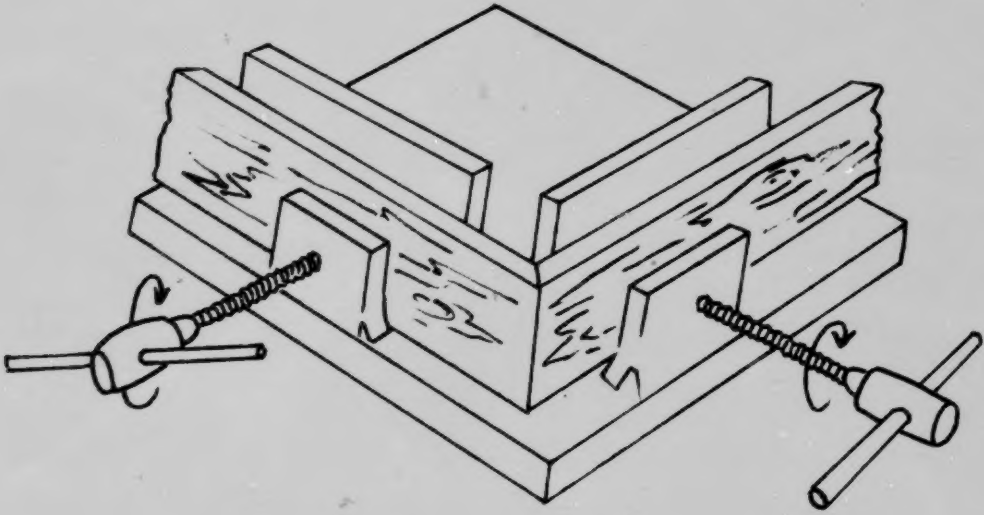
UNIT II: Small Tools

OBJECTIVE: The student will be able to properly apply miter clamps

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place previously mitered stock in the clamp as in Figure 1 being sure mitered portions of stock properly meet.	
2. Tighten the clamp screws evenly so the mitered corner is drawn together and held there by clamp. Figure 2.	





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OPERATION SHEET
SC-2-40

COMPETENCY: Erect Tubular Scaffolding

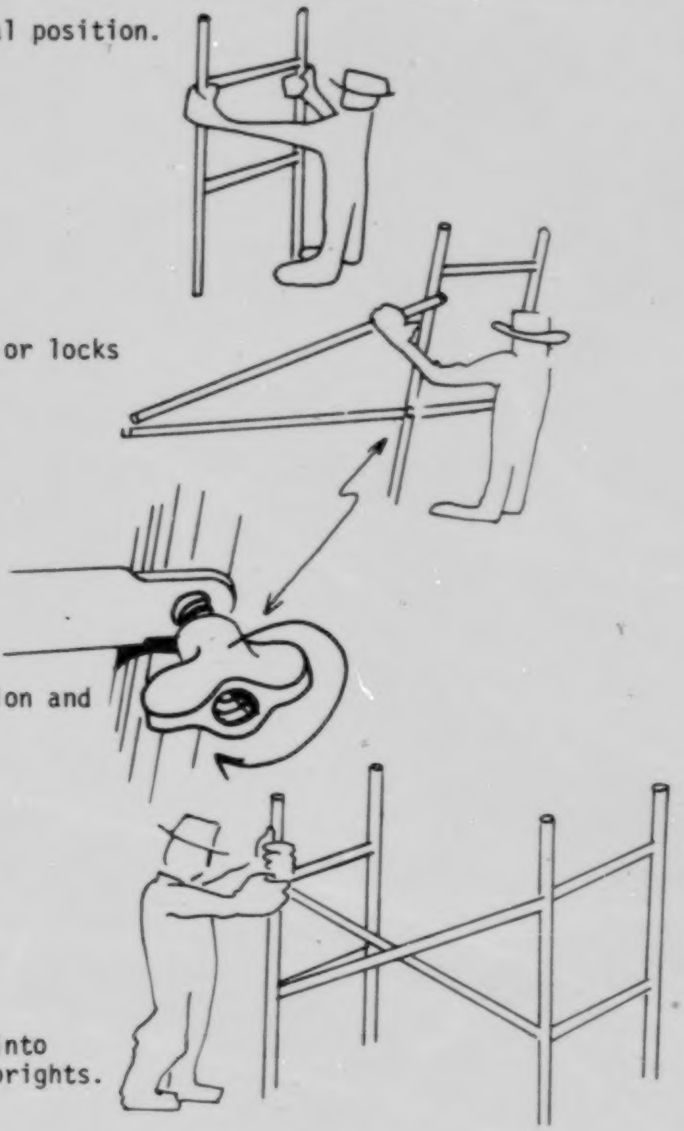
COURSE: Painting and Decorating

UNIT II: Small Tools

OBJECTIVE: The student will be able to properly set up scaffolding

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES



1. Place or hold upright in vertical position.

2. Install cross arms to wing nuts or locks on uprights; lock securely.

3. Place second upright into position and lock.

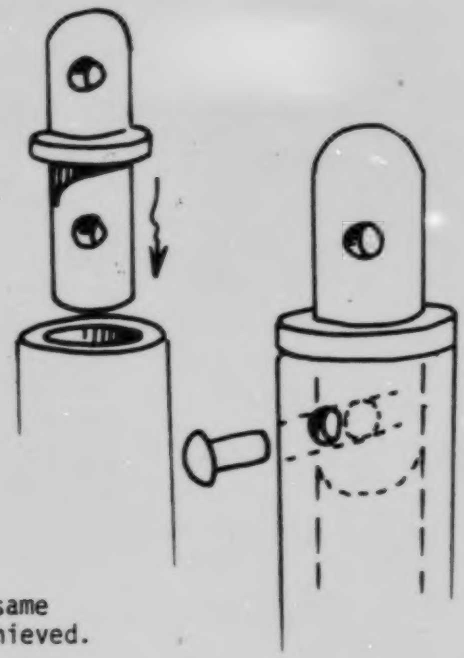
4. Raise and insert roller wheels into tubular openings at bottom of uprights.

5. Place pins through tube and wheel sections so they cannot fall out.

6. Install section pins in top of tubular uprights.

7. Continue erecting scaffolding in same manner until desired height is achieved.

8. Reach desired height and place cleated planks at desired working height.



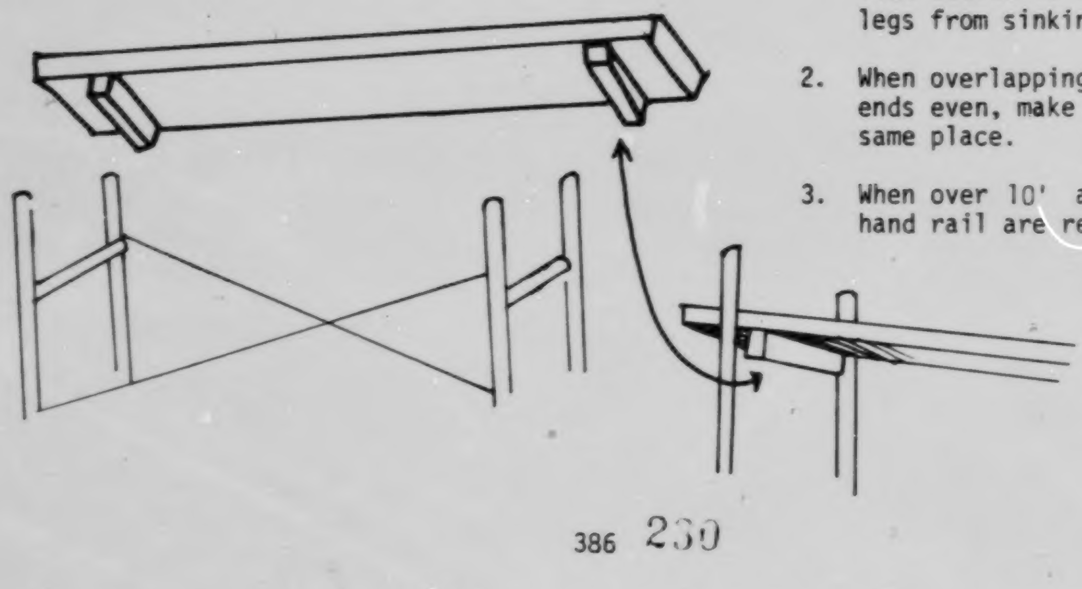
NOTE: When more than one set of planks is required, overlap twelve inches and nail.

SAFETY NOTE:

1. Before using or stacking over one buck high, level and set flat boards to keep pipe legs from sinking into ground.

2. When overlapping planks keep ends even, make all laps in same place.

3. When over 10' a toe board and hand rail are required.



OPERATION SHEET
SC-2-41

COMPETENCY: Erect Rolling Scaffold

COURSE: Painting and Decorating

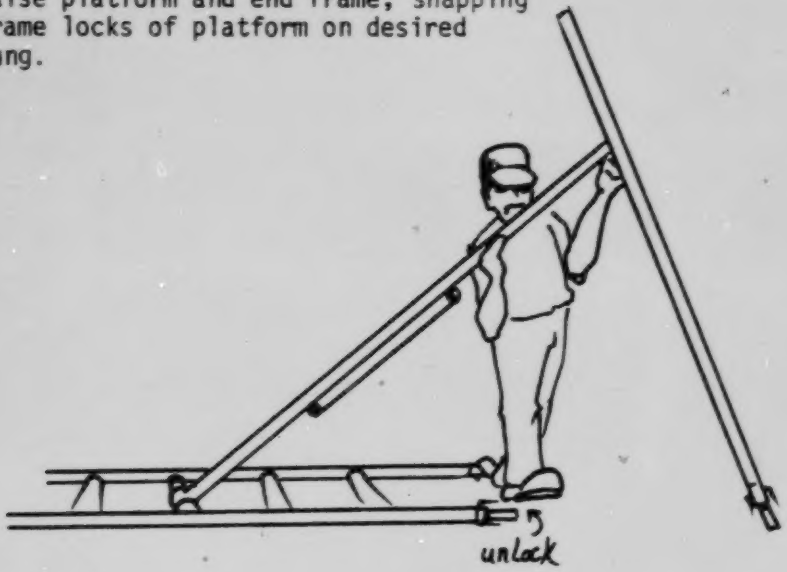
UNIT II: Small Tools

OBJECTIVE: The student will be able to set-up rolling scaffold by oneself

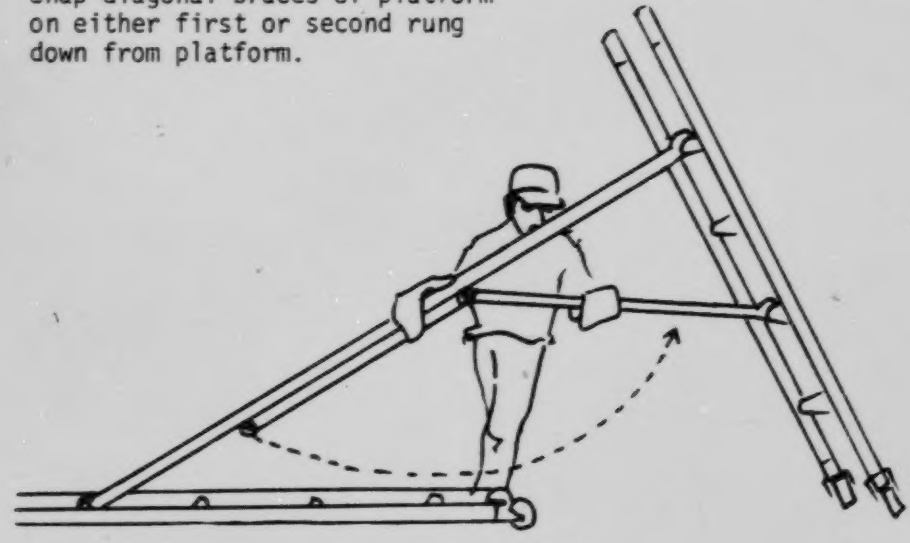
Page 1 of 3 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Raise platform and end frame, snapping frame locks of platform on desired rung.



2. Snap diagonal braces of platform on either first or second rung down from platform.



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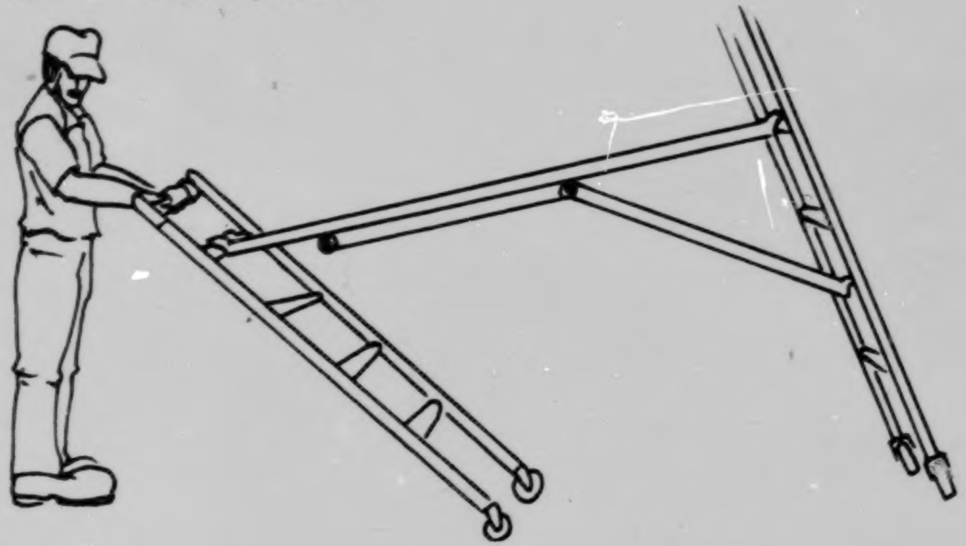
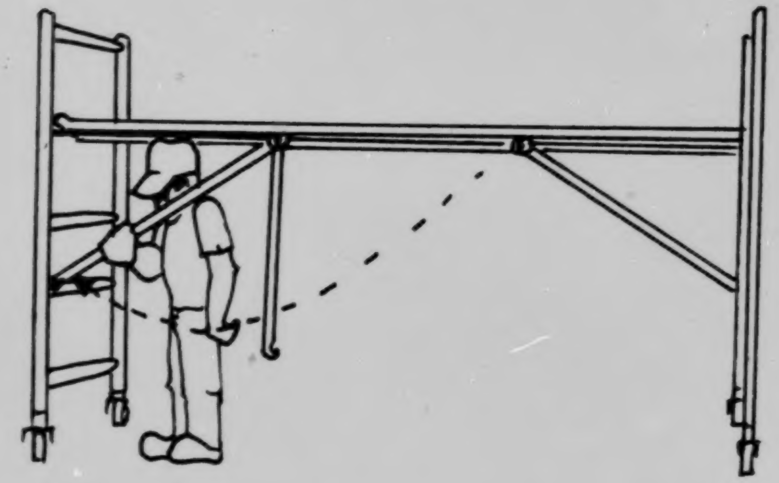
COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES

3. Lock other end of platform
to desired rung and raise
end frame to vertical position.

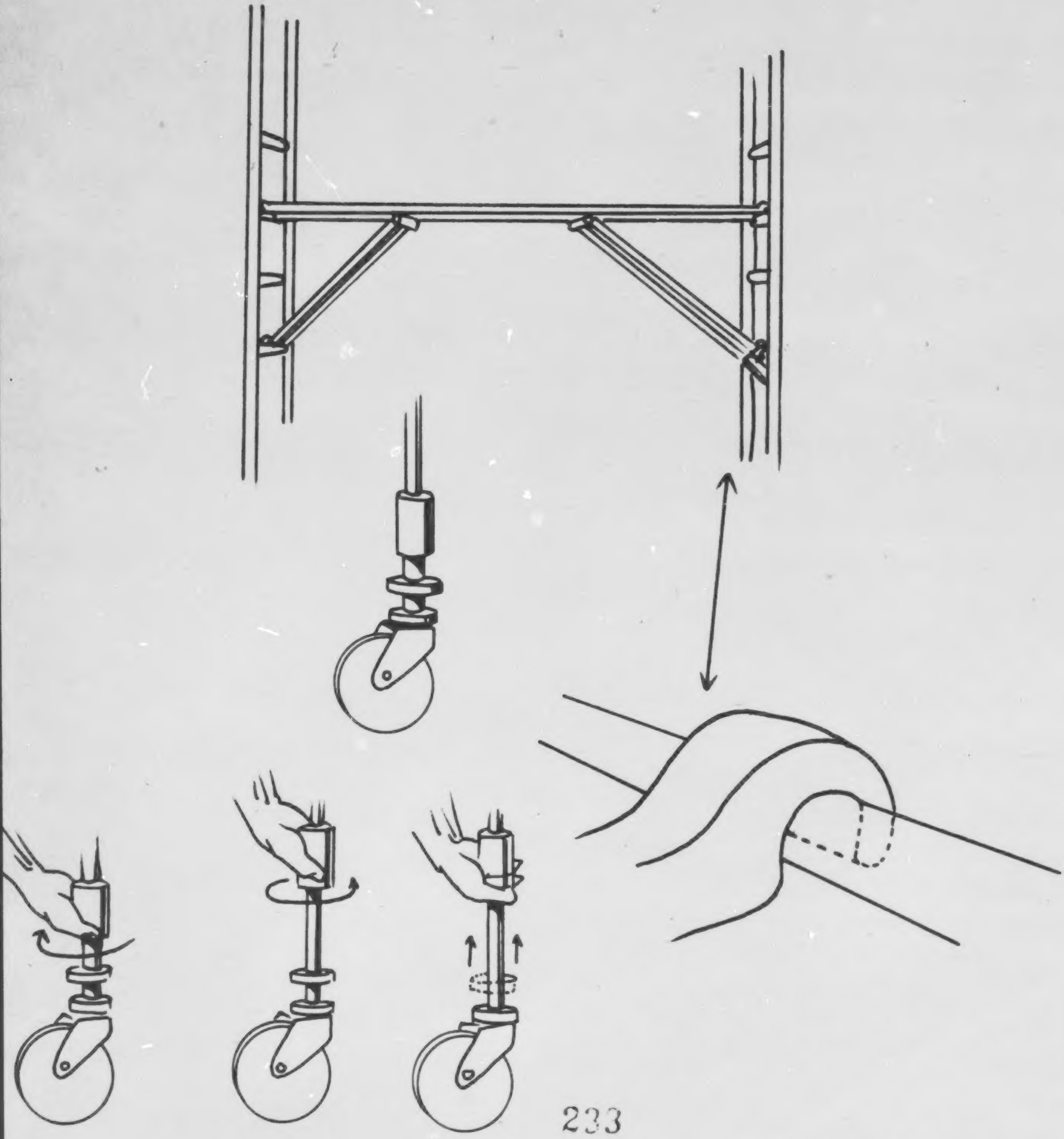


4. Snap diagonal braces of platform
on either first or second rung down
from the platform.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES

5. Snap on horizontal braces which serve as a guard rail.



OPERATION SHEET
SC-2-42

COMPETENCY: Use Paint Shaker

COURSE: Painting and Decorating

UNIT II: Small Tools

OBJECTIVE: The student will be able to use mechanical paint shaker

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place paint in cradles, and cradle and handle are locked in place.	NOTE: When using shaker do not leave immediate area. If something goes wrong turn timer back to zero or UNPLUG machine.
2. Set timer for desired time. (5-30 minutes)	
3. When machine shuts off remove material.	

OPERATION SHEET
SC-2-43

COMPETENCY: Mix Paint with Jiffy Mixer

COURSE: Painting and Decorating

UNIT II: Small Tools

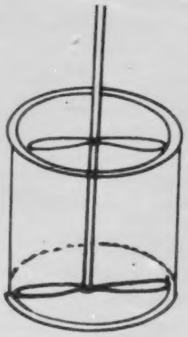
OBJECTIVE: The student will be able to mix paint using jiffy mixer

Page 1 of 1 page

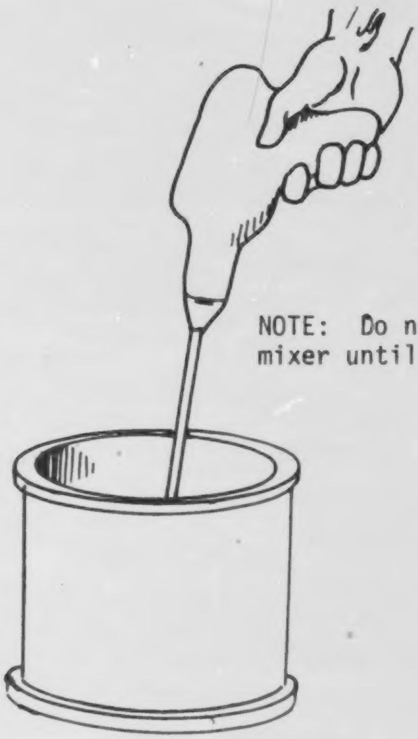
COMPETENCE - PROCEDURES/STEPS
The student will be able to:

1. Place jiffy mixer in chuck.
2. Tighten chuck with chuck key.
3. Place jiffy mixer in paint or paste to be mixed.
4. Hold at 20° out of perpendicular to avoid a vortex.
5. Agitate until material becomes thoroughly mixes.
6. Remove mixer from drill.
7. Clean jiffy mixer in appropriate solvent.

TEACHING/LEARNING ACTIVITIES



NOTE: If drill is vari-speed start slow and increase speed as material becomes loose and is mixed. If regular drill is used control speed by releasing trigger.



NOTE: Do not remove jiffy mixer until it stops moving.

OPERATION SHEET
SC-2-44

COMPETENCY: Mark a Long Line Using a Chalk Line

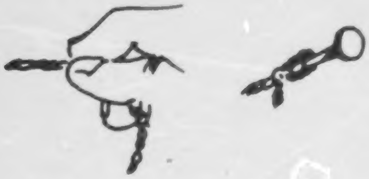
COURSE: Painting and Decorating — **UNIT II:** Small Tools

OBJECTIVE: The student will be able to snap a *clear straight line*

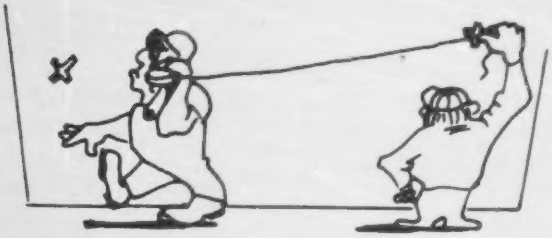
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

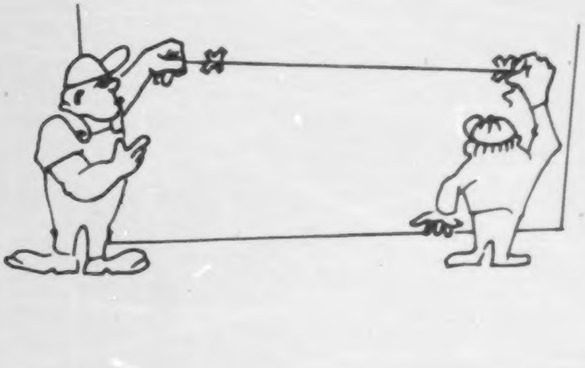
1. Attach loop at end of chalk line to a nail; or have someone hold the end of the line at the desired mark.



2. Pull line from the reel by walking away from the holding point.

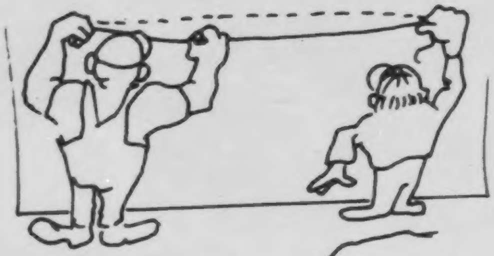


3. When the desired distance has been reached, pull the line tight, passing line over the desired mark, press the line to the surface to be marked.

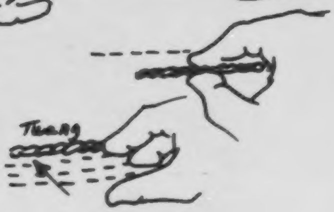


COMPETENCE - PROCEDURES/STEPS | TEACHING/LEARNING ACTIVITIES

4. Use free hand to pull the line away from the surface, then release the line allowing it to snap back to the surface.



5. Reel in the line.



OPERATION SHEET
SC-2-45

COMPETENCY: Cut Material with Utility Knife

COURSE: Painting and Decorating

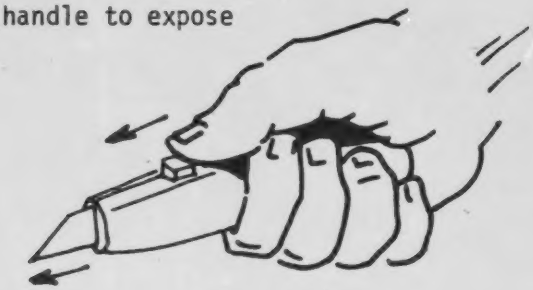
UNIT II: Small Tools

OBJECTIVE: The student will be able to properly and safely cut material with a utility knife

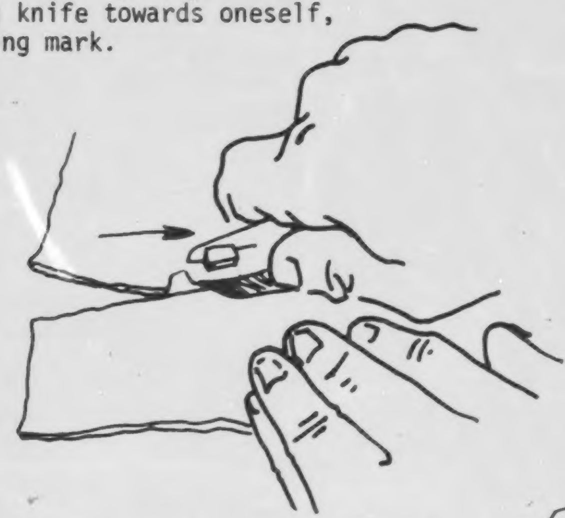
Page 1 of 1 page

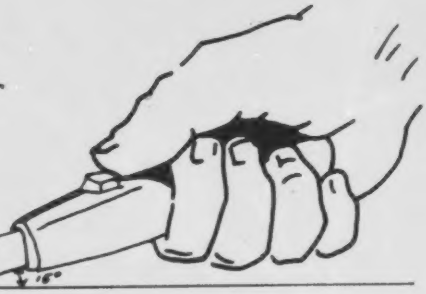
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Mark insulation for desired cut.
2. Push button on knife handle to expose blade.



3. Apply downward pressure and pulling knife towards oneself, cut along mark.





NOTE: When the cut is finished, push the button to cover the blade.

OPERATION SHEET
SC-2-46

COMPETENCY: Cut Strips of Drywall with Rule and Utility Knife

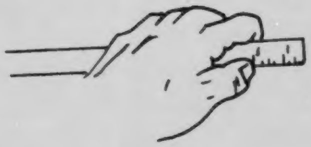
COURSE: Painting and Decorating UNIT II: Small Tools

OBJECTIVE: The student will be able to properly cut long narrow strips quickly and accurately

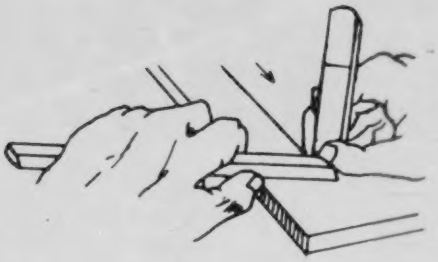
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

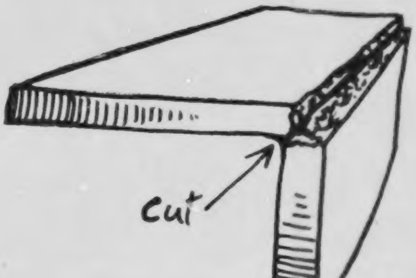
1. Hold the thumbnail on the edge of the rule at the graduation needed.



2. Hold the utility knife in the other hand.



3. Use the thumbnail as a guide and pulling the rule and utility knife along the stock, cut through the paper face.



4. Brake board and cut paper on back side.

OPERATION SHEET
SC-2-47

COMPETENCY: Use a Plumb Bob

COURSE: Painting and Decorating

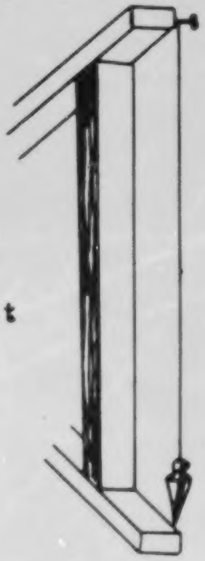
UNIT II: Small Tools

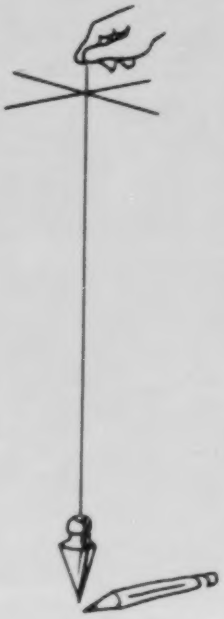
OBJECTIVE: The student will be able to establish a plumb vertical line

Page 1 of 1 page

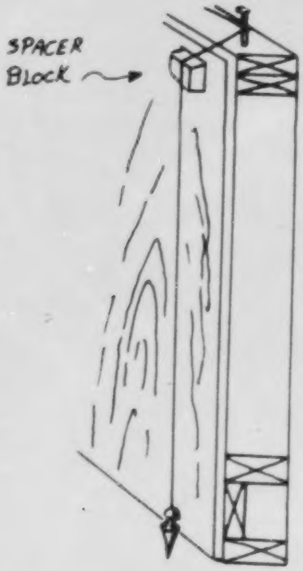
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Determine starting point for first sheet of material.





2. Set a tack or nail at this point three inches from the ceiling.
3. Attach line from plumb bob so that plumb bob swings above baseboard.
4. Allow plumb bob to come to rest then place a mark directly behind point or line.



5. Proceed to snap a chalk line between the two points established using the plumb bob.

OPERATION SHEET
SC-2-48

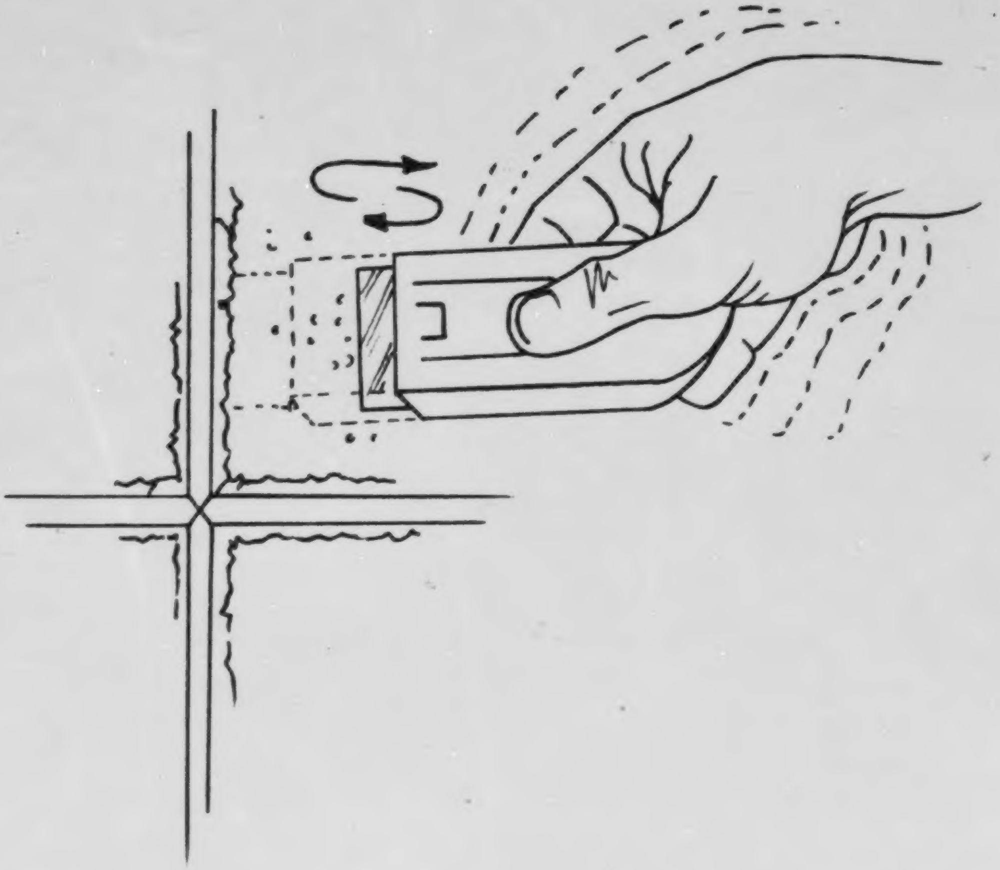
COMPETENCY: Use a Razor Scraper

COURSE: Painting and Decorating UNIT II: Small Tools

OBJECTIVE: The student will be able to safely and cleanly scrape paint from a pane of glass using a razor scraper

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Extend the blade of the razor blade scraper and placing the blade flatly against the surface at a 15° to 20° angle, scrape the paint from the surface.	NOTE: When the scraping is completed, fully retract the blade so that the blade is never exposed when the scraper is stored.



OPERATION SHEET
SC-2-49

COMPETENCY: Use a Paint Mitt to Paint Pipe and Metal Beams

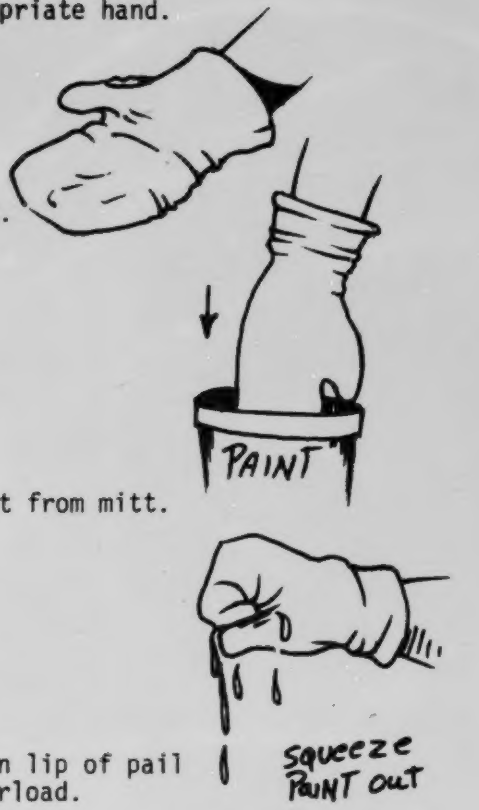
COURSE: Painting and Decorating **UNIT II:** Small Tools

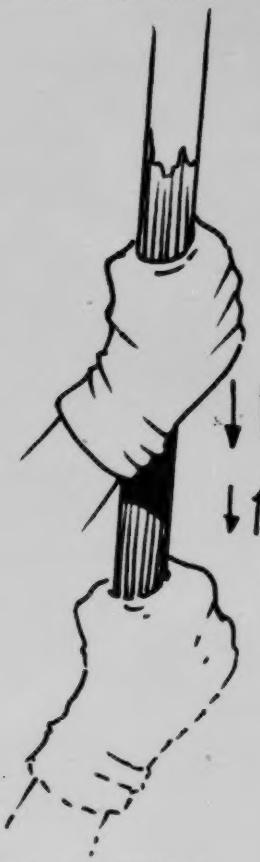
OBJECTIVE: The student will be able to paint pipe quickly

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place mitt on appropriate hand.
2. Dip mitt into paint.
3. Squeeze excess paint from mitt.
4. Wipe back of mitt on lip of pail to remove paint overload.





5. Apply paint with long smooth strokes using one or more moves to do pipe or angle irons.

NOTE: Small pipes and angles can be done in one move. Always work from dry to wet.

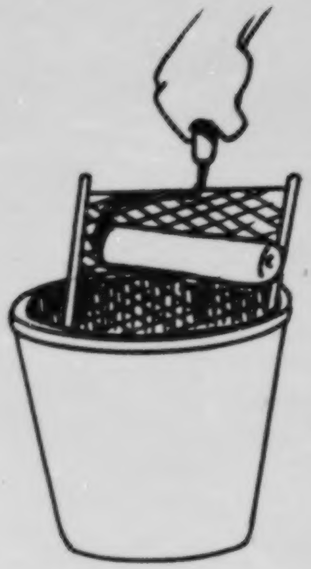
OPERATION SHEET
SC-2-50

COMPETENCY: Use Roller Ramp

COURSE: Painting and Decorating **UNIT II:** Small Tools

OBJECTIVE: The student will be able to use roller ramp

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place ramp in 5 gallon bucket as shown. 2. Place 2-3 gallons of material in bucket. 3. Load roller and roll out on screen.	

OPERATION SHEET
SC-3-1

COMPETENCY: Fold and Cut a Sheet of Abrasive Paper into Two Sanding Pads for Hand Sanding

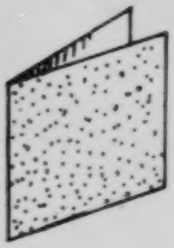
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to fold and cut a sheet of abrasive paper into two sanding pads with three abrasive sides

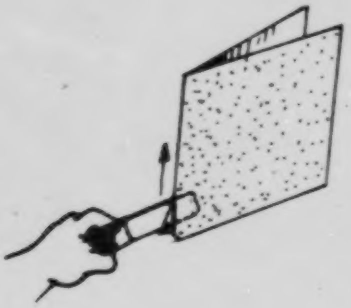
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

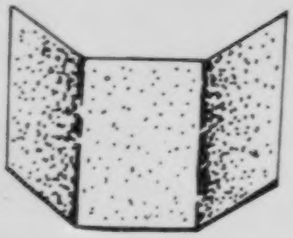
1. Fold the full sheet in the middle along the long dimension so that the abrasive side is turned out.



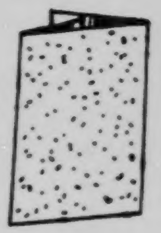
2. Use a putty knife, and drawing the knife through the fold, cut the full sheet in half.



3. Fold each sheet into three equal parts across the long dimension.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
4. Follow this procedure in order to have two abrasive pads with three sanding sides, none of which come in contact with another abrasive side.	



NOTE: As the sanding pad becomes worn on one side, turn the pad over or unfold the third side which was folded inside the pad.

OPERATION SHEET
SC-3-2

COMPETENCY: Fold and Cut a Sheet of Abrasive Paper into Three Sanding Pads for Hand Sanding

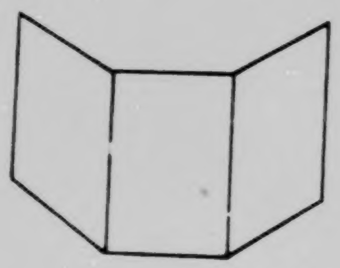
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to fold and cut a sheet of abrasive paper into three sanding pads

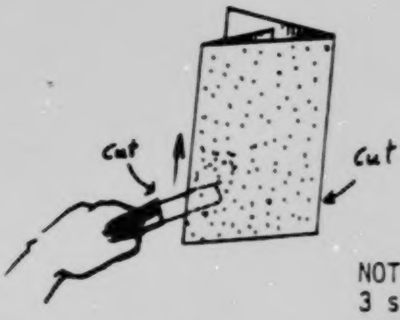
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Fold a full sheet of abrasive paper into 3 equal parts along the long dimension of the sheet with the grit side out.

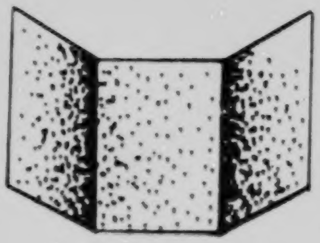


2. Use a putty knife to cut along both folds.



NOTE: Following this procedure 3 sanding pads with three sanding sides will result.

3. Fold each of the 3 small sheets into three equal parts along the 9" dimension with the grit side out.

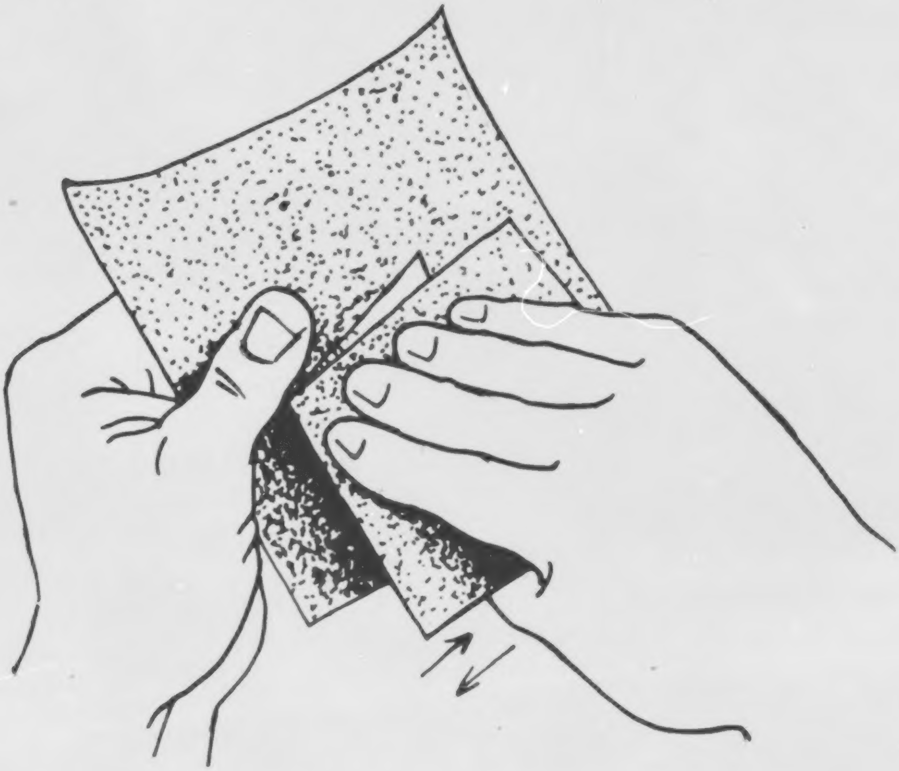


NOTE: As one side becomes worn, turn the pad over or unfold the third side to expose a new abrasive surface.

OPERATION SHEET
SC-3-3

COMPETENCY:	Remove Large Pebbles of Grit from Abrasive Paper	
COURSE:	Painting and Decorating	UNIT III: Finishing
OBJECTIVE:	The student will be able to remove large and sharp grit edges from abrasive paper	Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Select the abrasive paper to be used for hand or mechanical sanding.	
2. Use two sheets of this abrasive paper rubbing them together very lightly several times to remove the edges that protrude above the grit surface.	



OPERATION SHEET
SC-3-4

COMPETENCY: Hand Sand New Wood Using a Sanding Block

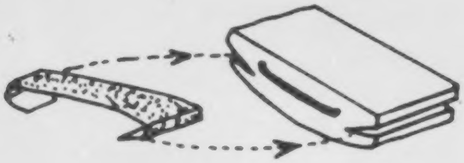
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to smooth sand a new wood surface using a sanding block

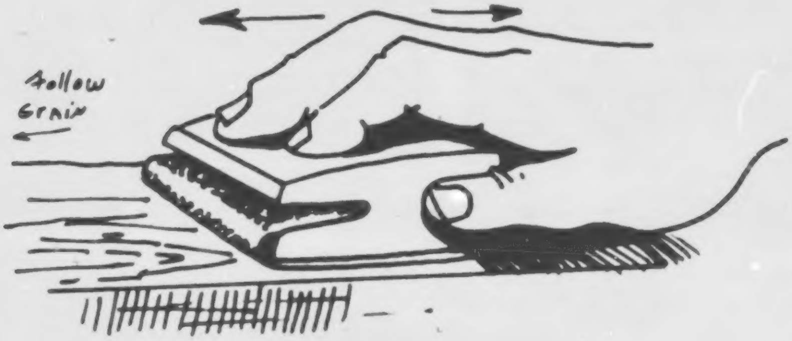
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Select the proper abrasive paper; grit size and backing.
2. Cut the abrasive paper to size to fit the base of the sanding block.
3. Attach the abrasive paper to the sanding block.



4. Sand the surface using long strokes with uniform pressure on the sanding block while following the grain or parallel direction of the wood.



OPERATION SHEET
SC-3-5

COMPETENCY: Hand Sand Curved Surfaces

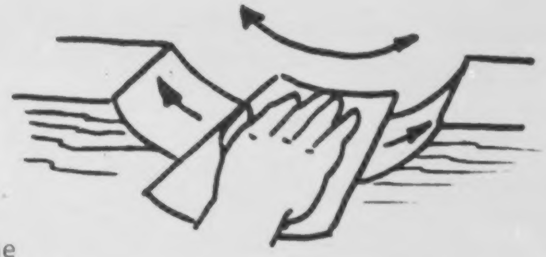
COURSE: Painting and Decorating

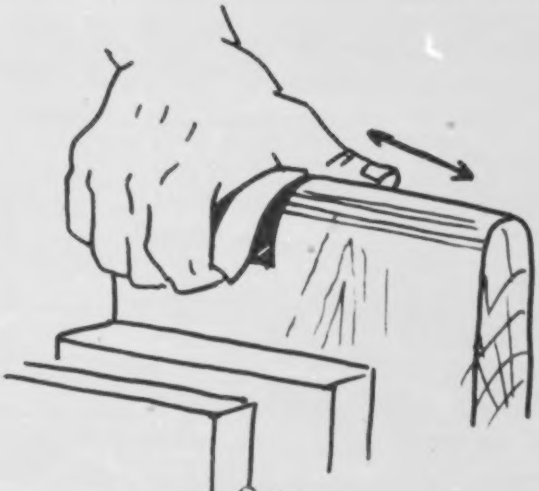
UNIT III: Finishing

OBJECTIVE: The student will be able to smooth sand a curved surface by hand

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Select the proper abrasive paper; grit size and backing.	
2. Fold the abrasive paper to the desired size sanding pad.	
3. Sand a curved surface by placing a pad of sandpaper on the curve and shaping it with the fingers or the palm of the hand.	
4. Keep uniform pressure on the sanding pad in contact with the wood, and move the sandpaper back and forth with the grain direction.	NOTE: Be careful to keep the shape of the curve. NOTE: Rounded edges may be sanded by following the same procedure as shown below.





OPERATION SHEET
SC-3-6

COMPETENCY: Spread Drop Cloths

COURSE: Painting and Decorating

UNIT III: Finishing

OBJECTIVE: The student will be able to properly cover floors, furniture and work area

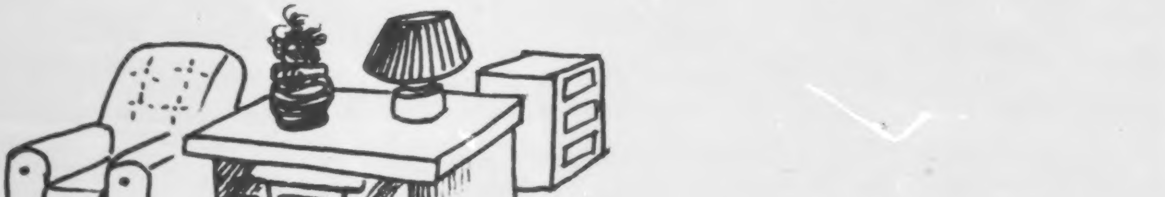
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS
The student will be able to:

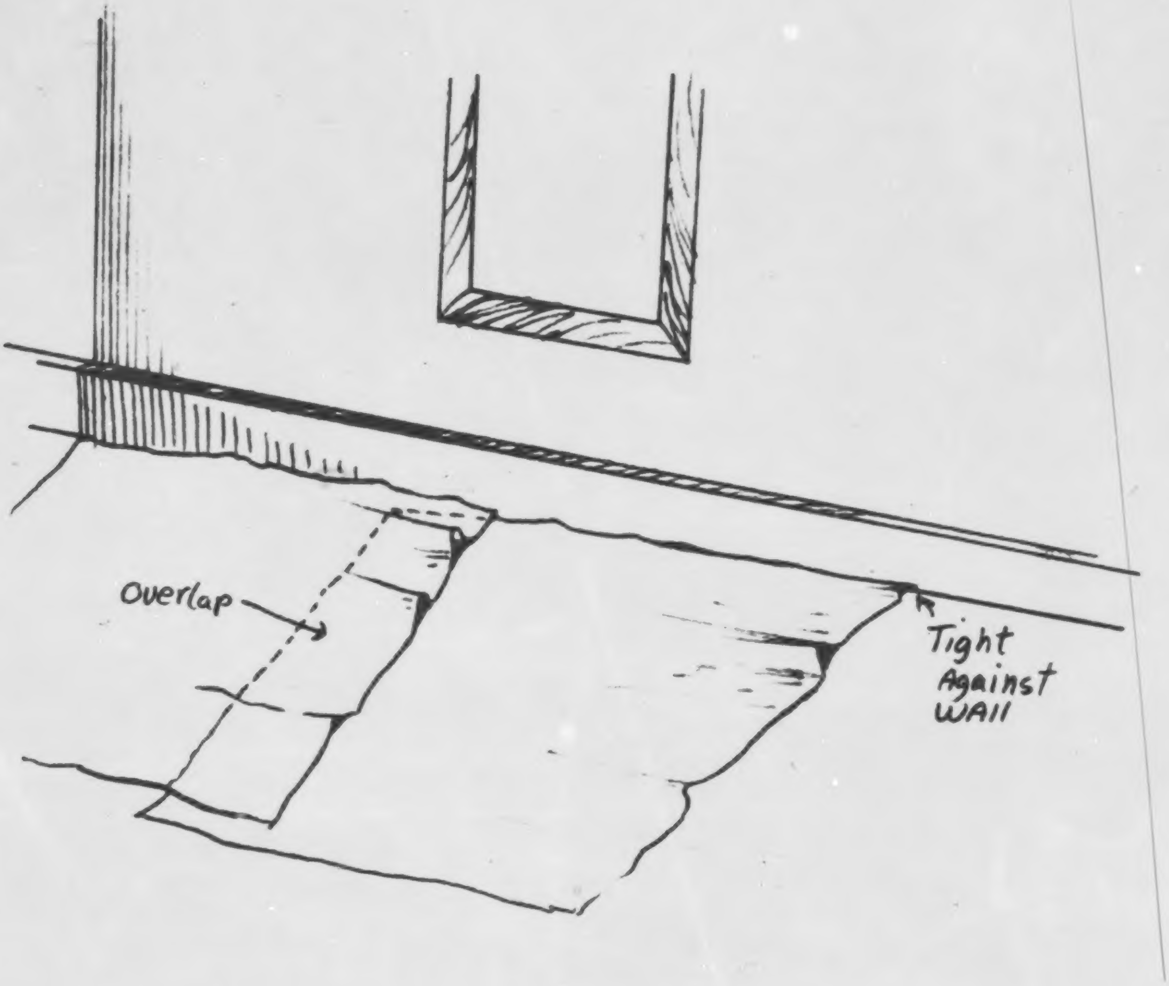
1. Drop a large duck drop cloth (not paper) over the entire group of furniture so all pieces are completely covered.

TEACHING/LEARNING ACTIVITIES

NOTE: Furniture that can't be removed from the area should be clustered in the center of the area.



3. Spread drop cloths on floor around the clustered furniture being sure to spread cloths tight against the walls on all sides and overlapping them where they come together.



OPERATION SHEET
SC-3-7

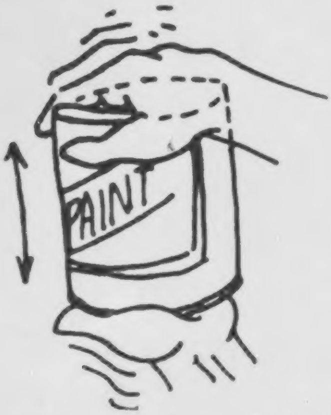
COMPETENCY: Prepare a Container of Paint for Painting

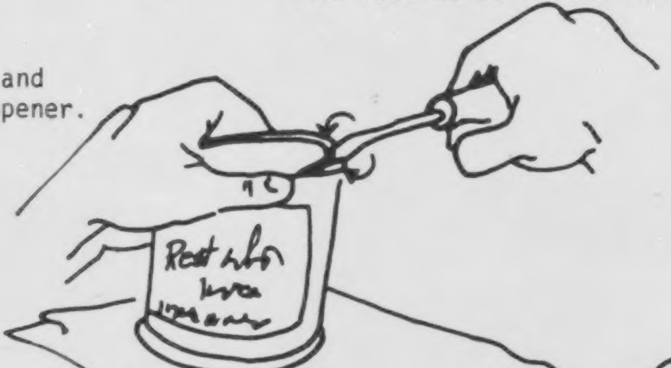
COURSE: Painting and Decorating **UNIT III:** Finishing

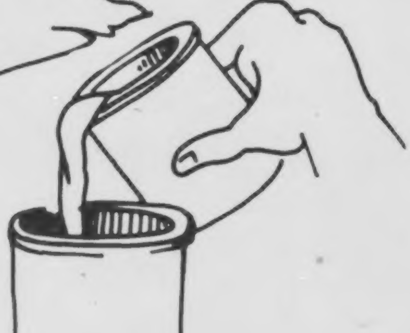
OBJECTIVE: The student will be able to properly mix and prepare a container of paint for application

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold the lid and shake the can of paint hard, or place on a paint shaker.	NOTE: Most paint in cans is thin on the top and is a thick paste on the bottom of the can. If it were used this way, the first area painted would not be the same color as the last. Paint must be mixed well for even application and color. NOTE: A paint can which has been opened should never be placed on shaker or shook in hands because, a skin may have formed inside on top of the paint. It will be broken loose and become hidden and will then have to be fished out.
2. Set the can on the cloth and open the can with a lid opener.	
3. Pour the top (oil) off into the clean can.	

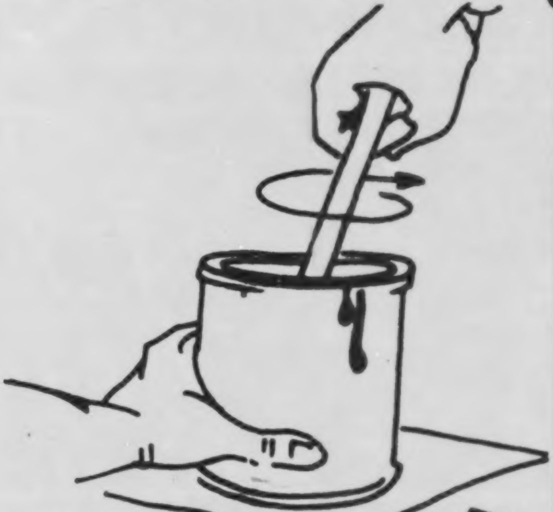




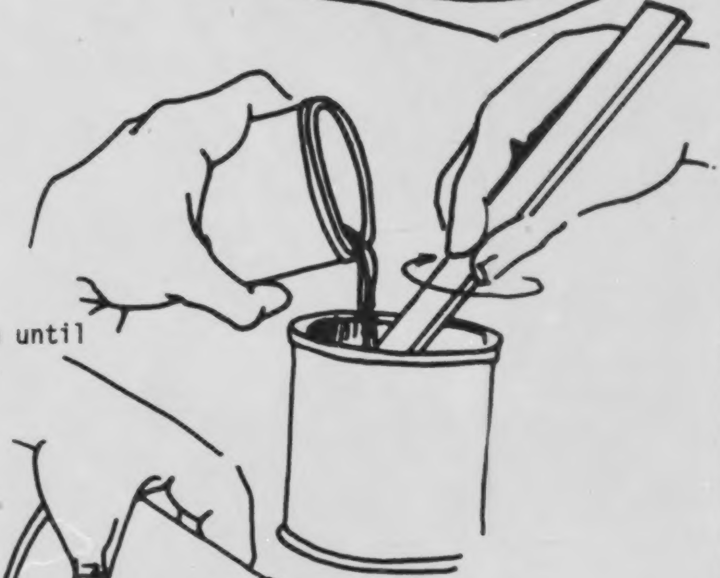


COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES

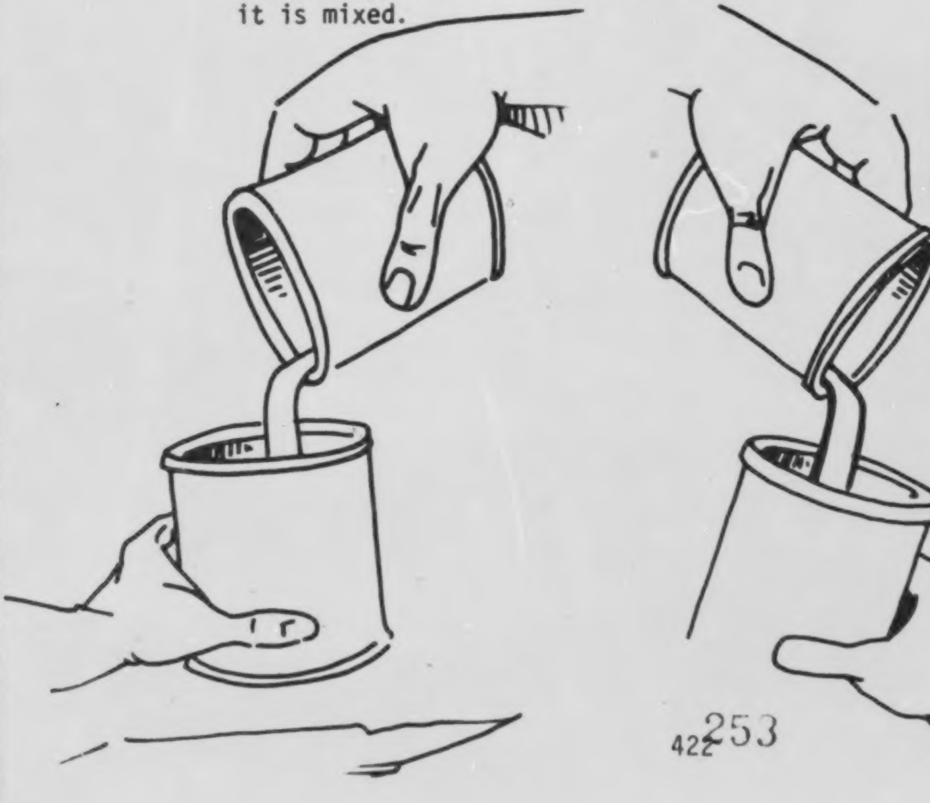
4. Mix the paste in the bottom of the paint can.



5. Pour the oil back in a little at a time and mix it in thoroughly.



6. Pour the paint back and forth until it is mixed.



OPERATION SHEET
SC-3-8

COMPETENCY: Stir Paint with a Paint Paddle

COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to become proficient in the use of a paint paddle for mixing paint

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold the paddle with one hand, and begin stirring by pushing paddle to the extreme depth of the paint can. Fig. 1
2. Move the paddle in a circular motion and also raise it slightly pulling the paint from bottom of the can toward the top. Fig. 2
3. Make about one half of a revolution and lowering the paddle deeper into the can, continue through the remainder of that revolution pushing the paint from the top of the can toward the bottom. Fig. 3
4. Continue this circular up-and-down motion until the paint in the can has been thoroughly blended through-out.

NOTE: The paint should then be ready for application.

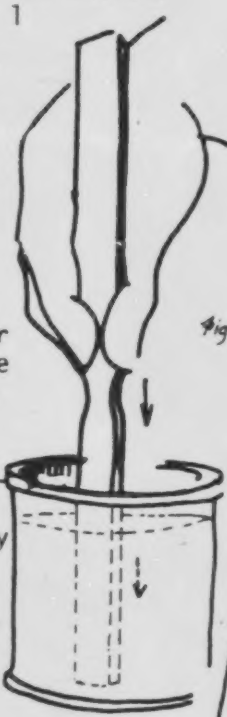


Fig. 1.

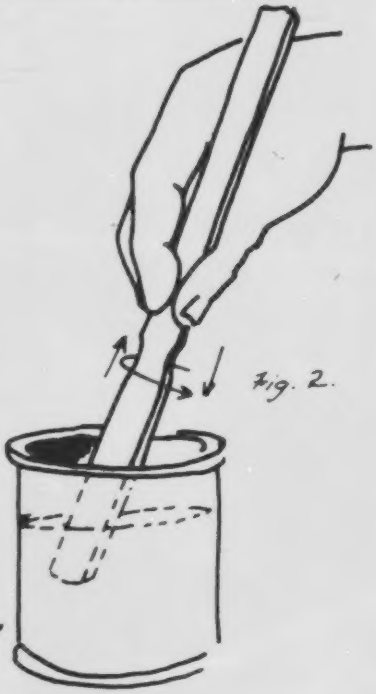


Fig. 2.

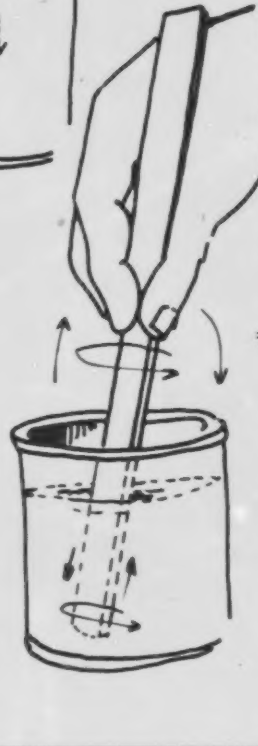


Fig. 3.

OPERATION SHEET
SC-3-9

COMPETENCY: Strain Paint with Cheese Cloth

COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to properly strain paint into an appropriate container through cheese cloth

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Select the appropriate container, then cut cheese cloth so it overlaps the container edge enough to be gathered and tied down. Fig. 1.

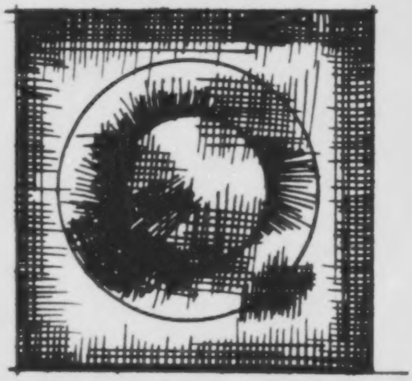


Fig. 1.

2. Gather and fold the material down over the edge of the container. Fig. 2.

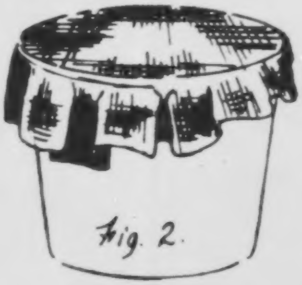


Fig. 2.

NOTE: Take care to gather all ends allowing a pocket to form inside the rim of the container. Fig. 2.

3. Rap a piece of twine around the material just below the top of the container. Fig. 3.

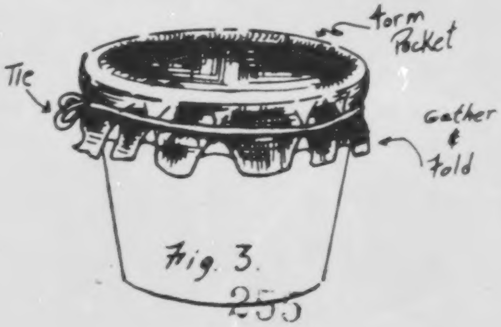


Fig. 3.

COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
4. Carefully pour the paint into the pocket of the cheese cloth giving it time to flow through the cheese cloth. Fig. 4.	CAUTION: Do not pour too fast so spillage is avoided.

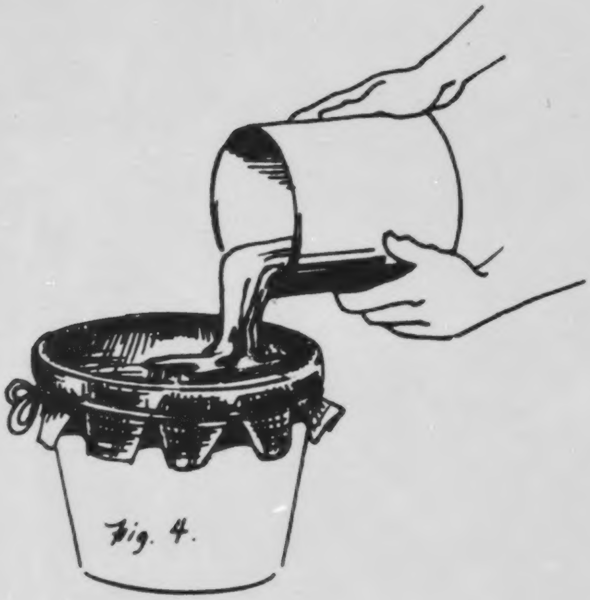


Fig. 4.

OPERATION SHEET
SC-3-10

COMPETENCY: Apply Stain with a Cloth

COURSE: Painting and Decorating

UNIT III: Finishing

OBJECTIVE: The student will be able to uniformly apply a wood stain to a wood surface

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Pour a small amount of stain into a small pan. Fig. 1.
2. Form a piece of cheese or other soft cloth into a pad, and dip the underside of the pad into the stain. Fig. 2.

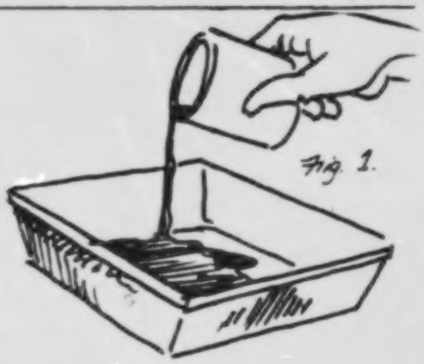
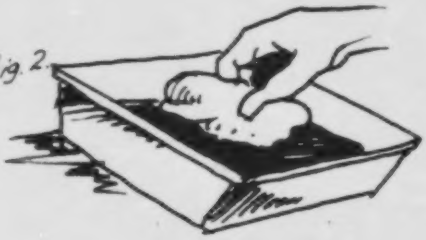


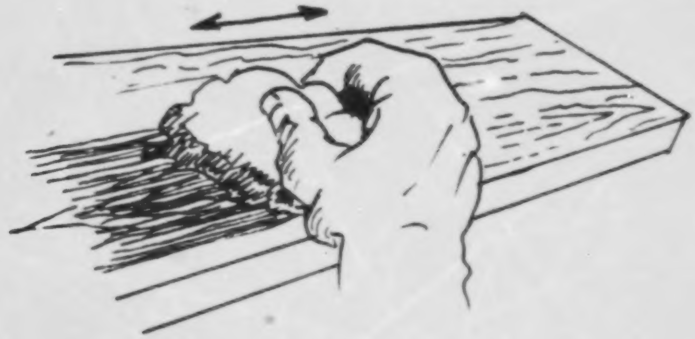
Fig. 1.

3. Rub the moistened pad over the wood surface in the direction of the grain.

Fig. 2.


4. Continue wiping the surface until all excess stain is removed from the pad and the surface is uniformly covered or colored with stain.

NOTE: It may be necessary, in some cases, to wipe the surface with a clean cloth



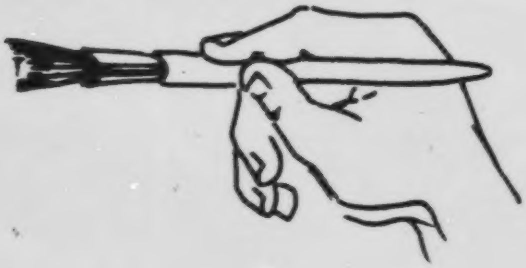
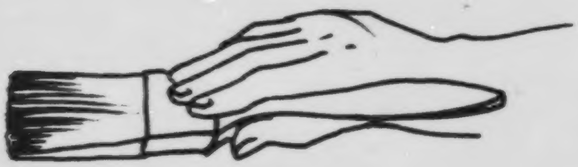
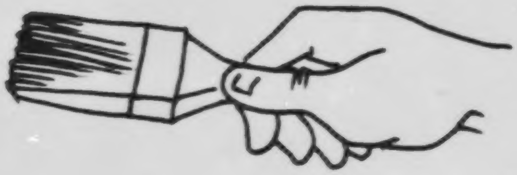
OPERATION SHEET
SC-3-11

COMPETENCY: Hold a Paint Brush

COURSE: Painting and Decorating   **UNIT III:** Finishing

OBJECTIVE: The student will be able to properly hold various types and shapes of paint brushes

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold small oval sash and fitch brushes in the same way a pencil is held. 	
2. Hold a flat or semi-oval brush with the thumb having fingers grip the ferrule of the brush. 	NOTE: A flat or semi-oval brush is used when painting vertical or flat surfaces.
3. Use a flat brush by grasping the handle of the brush, with all of the fingers in a simple grip. 	NOTE: A flat brush is used for painting overhead surfaces.

OPERATION SHEET
SC-3-12

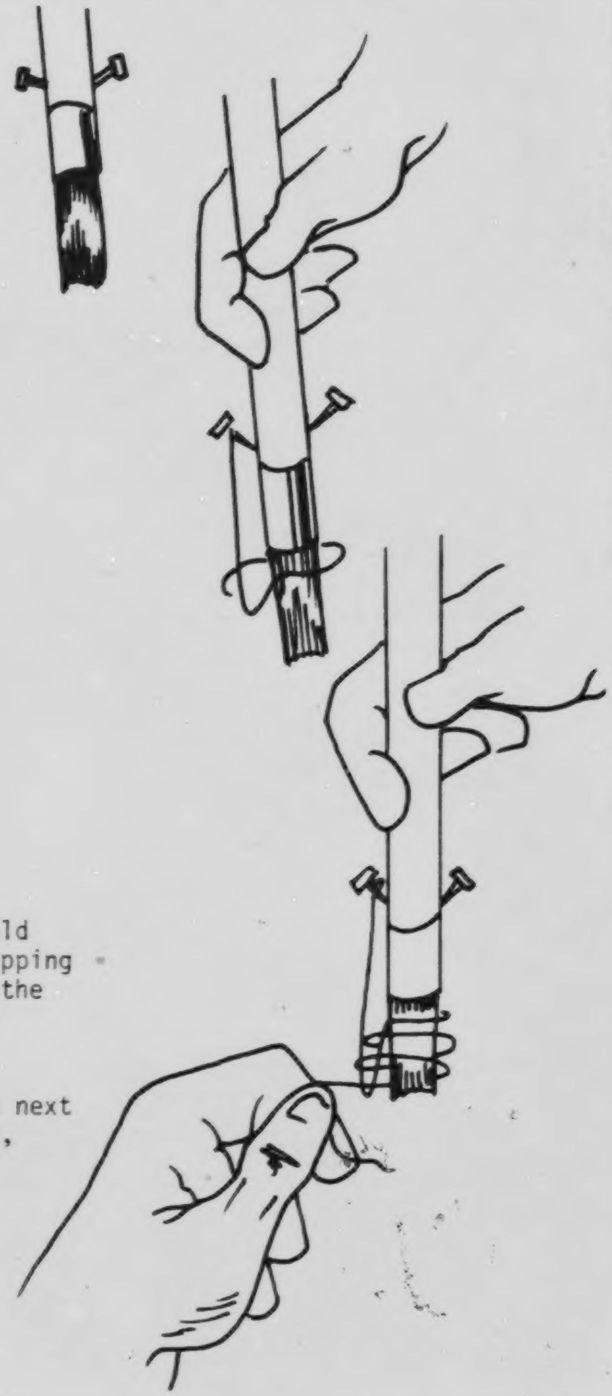
COMPETENCY: Bridle a Paint Brush

COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to correctly bridle a paint brush by wrapping the bristle in such a manner that the bristles are not twisted

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES



1. Set two tacks in the handle of the brush on opposite sides just above the ferrule.

2. Grasp the brush in one hand, and form a loop of cord toward the tip of the bristles.

   NOTE: The cord loop should be about 1/3 the length of the bristles and the end should extend back beyond the ferrule and the tack on the handle.

3. Use the thumb on one hand to carefully hold the "starter" loop in place and begin wrapping the cord around the bristle back against the ferrule and continue the wrap around the bristle and over the starter loop.

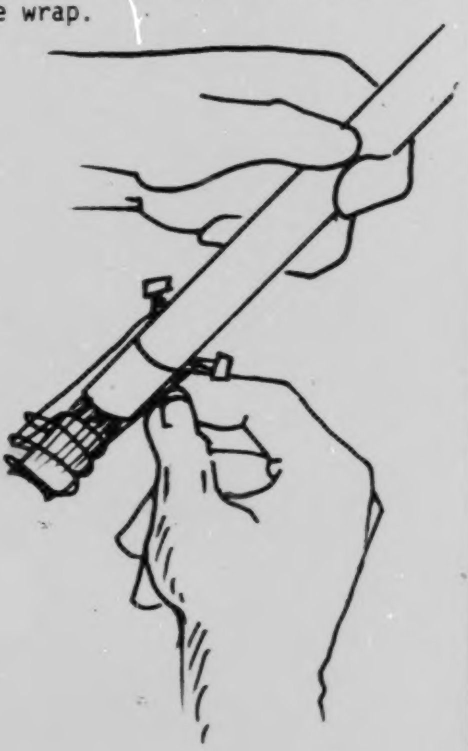
   NOTE: Each wrap of cord should lay right next to the one preceding it and be drawn snug, not too tight.

COMPETENCE - PROCEDURES/STEPS | TEACHING/LEARNING ACTIVITIES

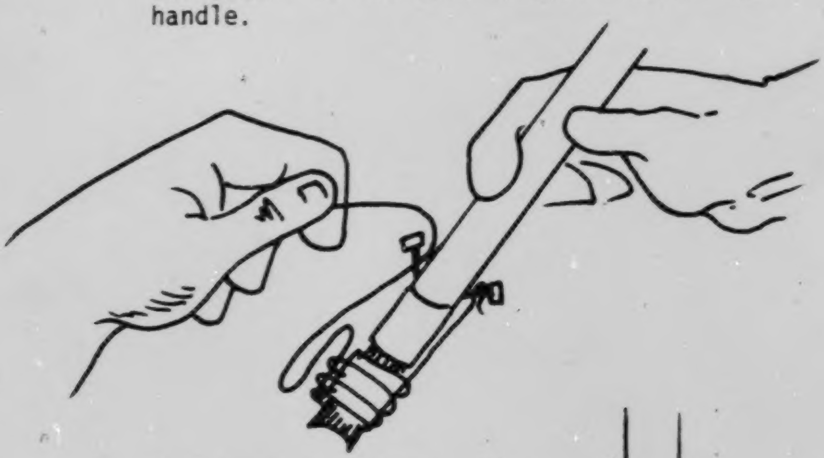
4. Form second loop by again holding the cord with one thumb and reversing the wrap.

5. Continue all the way around the brush, with cord, to the loop just made and pull snug from the back.

NOTE: The number of wraps of cord depends on the bristle length and will vary from 6 for shorter bristles, to 10 for longer bristles. When sufficient wraps have been made, a loop must be formed opposite the "starter" loop to reverse the direction of the wrap.

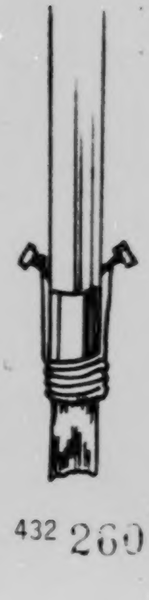


6. Bring the end of the "starter" cord down over the wrappings by passing it down through the starter loop and drawing the cord snug up against the wrappings, then return that end up over the wrappings and secure to the tack on that side of the handle.



7. Set the tack and cut off the excess cord as close as possible to the tack.

NOTE: The completed bridled brush will look like this.



OPERATION SHEET
SC-3-13

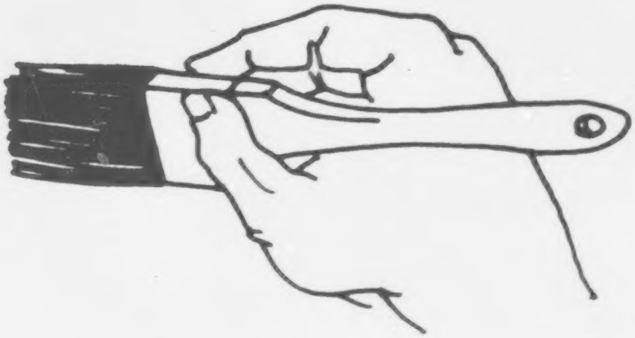
COMPETENCY: Load a Paint Brush

COURSE: Painting and Decorating **UNIT III:** Finishing

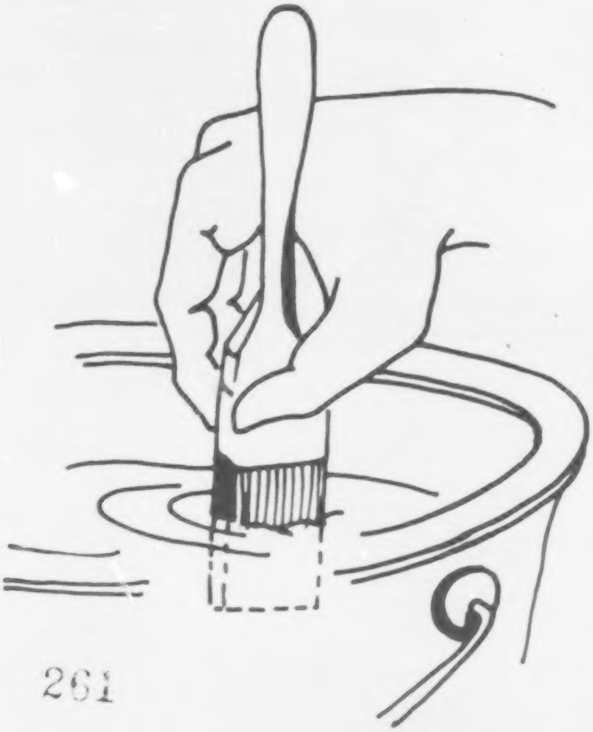
OBJECTIVE: The student will be able to properly load a paint brush with paint

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold the paint brush like a pencil would be held, making it easy to brush in either direction.	NOTE: If a painter uses a paint brush correctly, he won't get as tired as he would if he used it incorrectly. He will also get a more professional job and waste less paint.

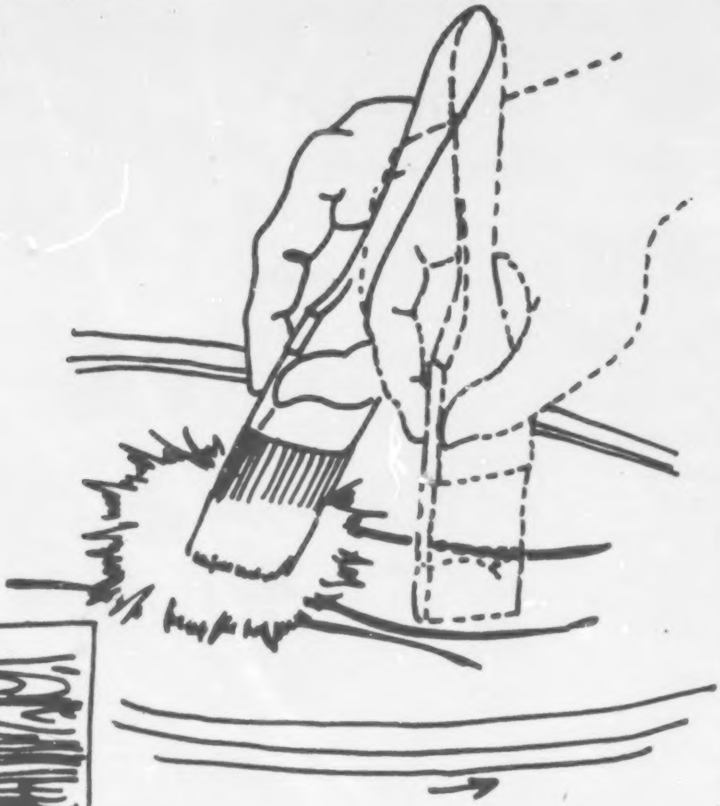


2. Dip less than half the length of the bristles into the paint.

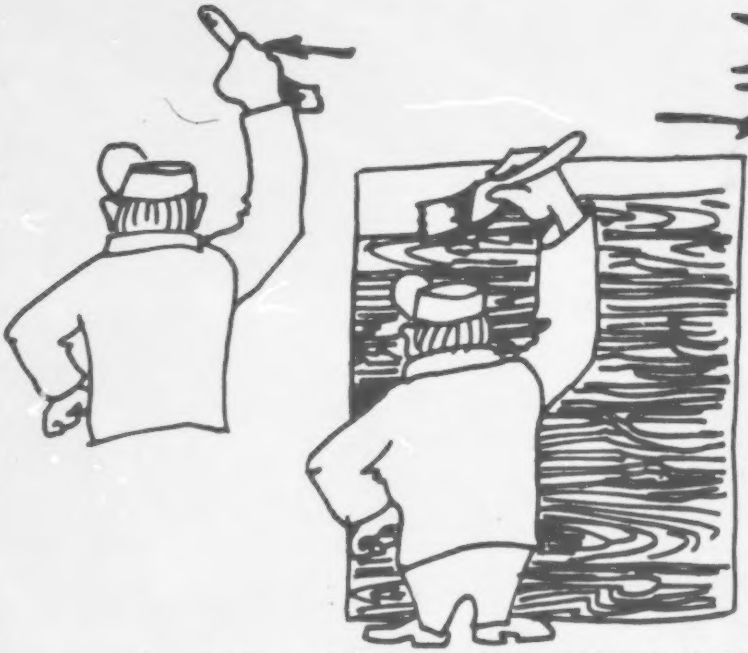


261

3. Set the paint into the bristles by slapping the bristles gently against the inside of the can.

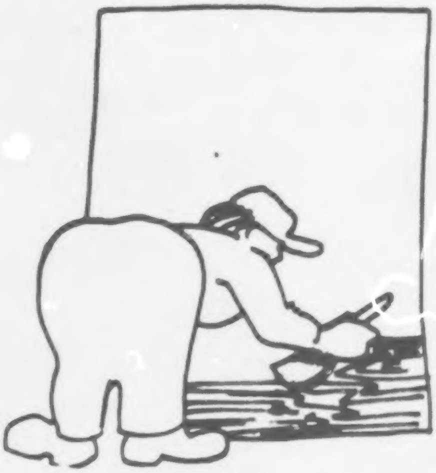


4. Start painting at the top of the area to be painted.



NOTE: The brush will always leave a mark where the stroke is begun, but not where the brush is lifted from the surface.

5. Apply a thin, even coat back and forth.



NOTE: When possible, paint the whole width of the area to keep from getting build up from overlapping strokes.

NOTE: Brush with the grain of the wood, not across the grain.

NOTE: Stir the paint from time to time.

OPERATION SHEET
SC-3-14

COMPETENCY: Clean a Paint Brush

COURSE: Painting and Decorating

UNIT III: Finishing

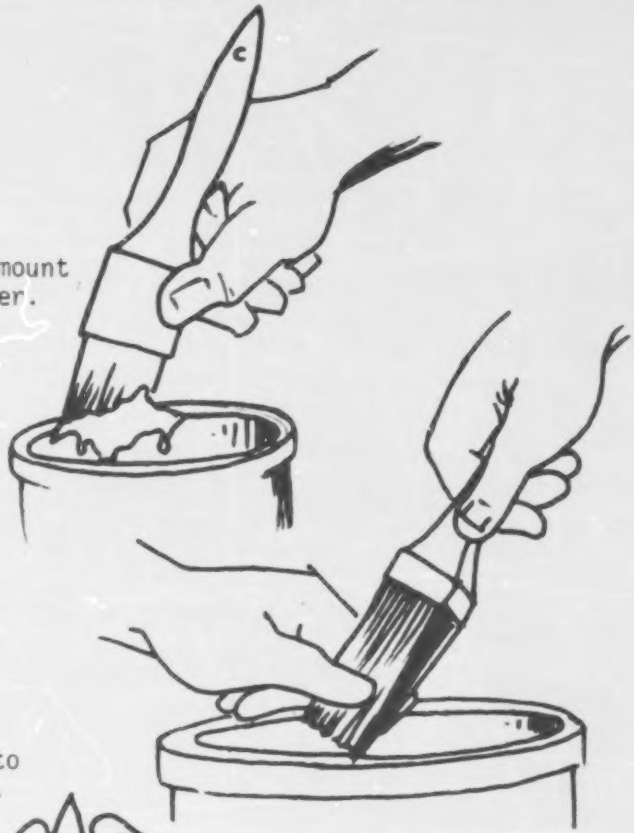
OBJECTIVE: The student will be able to properly clean a paint brush

Page 1 of 2 pages

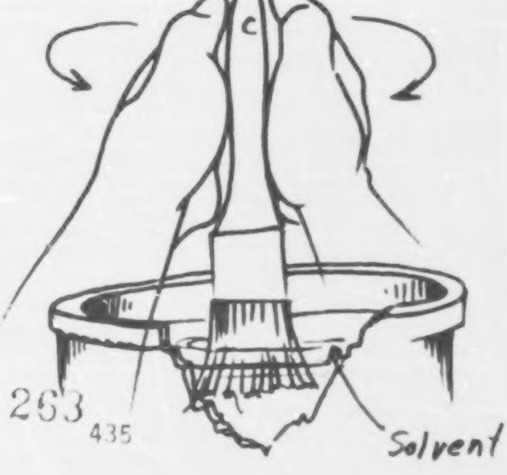
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove the excess paint from the brush by gently drawing the brush over the edge of the paint pail.	SAFETY PRECAUTION: Always wear safety glasses when cleaning paint brushes.

2. Clean the brush by pouring a small amount of the proper solvent into a container.

3. Wash the brush in the solvent.



4. Hold the brush between hands and spin or twirl the brush with the bristles suspended in the container to prevent the splashing of the solvent.

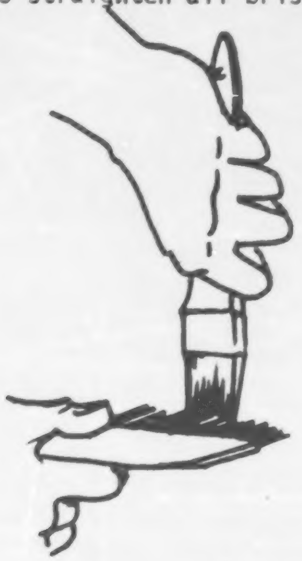


COMPETENCE - PROCEDURES/STEPS | TEACHING/LEARNING ACTIVITIES

5. Pour out the dirty solvent and repeat steps 3, 4 and 5 to completely remove any remaining traces of paint.

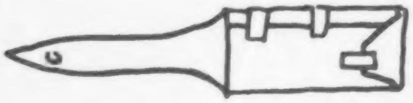
6. Wash the brush in a milk solution of soap and water, rinse the brush in clear water and spin out the excess water.

NOTE: If the brush is not going to be used for an extended period of time, gently comb the bristles to straighten all bristle material.



7. Cut a piece of Kraft paper to the proper size to wrap around the bristles of the brush and fasten with tape or a rubber band.

NOTE: Be sure the bristles do not become twisted when wrapping the brush.



8. Store the brush by hanging it on a hook or laying it flat on a shelf.

OPERATION SHEET
SC-3-15

COMPETENCY: "Lay On" and Brush Out Paint

COURSE: Painting and Decorating

UNIT III: Finishing

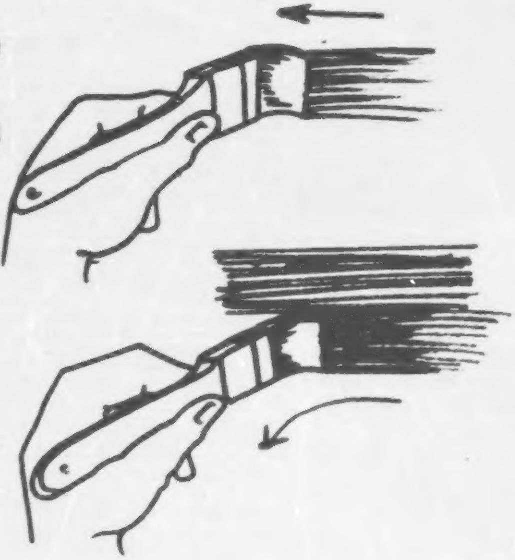
OBJECTIVE: The student will be able to apply paint uniformly to a flat surface

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

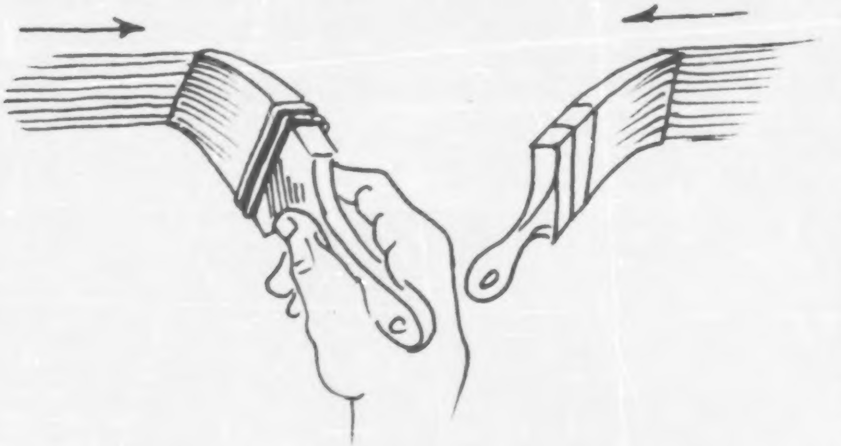
1. Load the brush, and lay the paint on the surface by exerting very light pressure at the start of the stroke and gradually increasing the pressure toward the end of the stroke until the paint has been applied to the surface.

2. Use long, leveling brush strokes to spread the paint smoothly and uniformly.



3. Finish off by brushing the paint with light pressure on the brush and brushing from the unpainted surface toward the painted surface.

NOTE: Stroke; by lifting brush, laying down and working in the opposite direction.



OPERATION SHEET
SC-3-16

COMPETENCY: Color Glazing Compound with Tinting Color

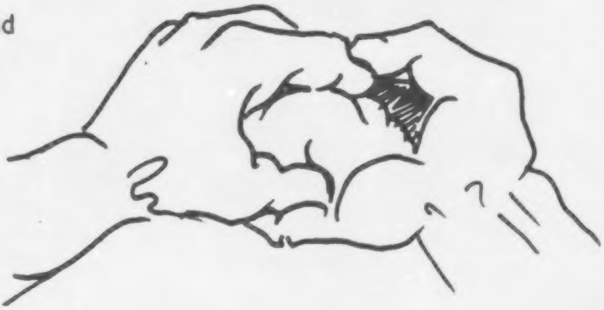
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to uniformly mix tinting color to match a stained surface

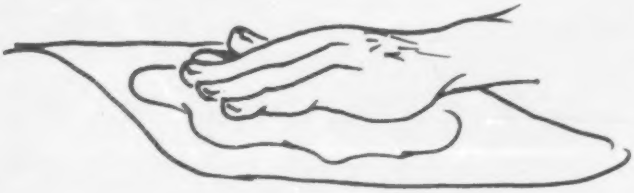
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

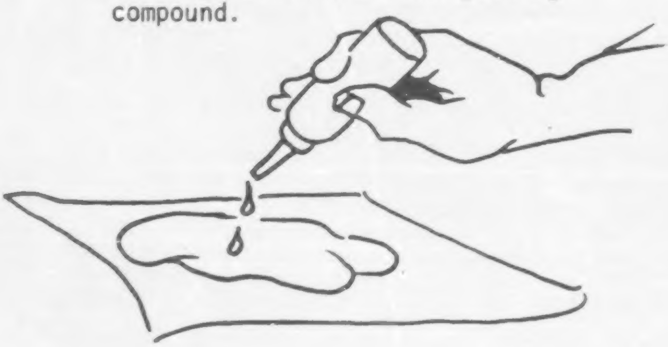
1. Work a small amount of glazing compound in the hands to soften the glazing compound.



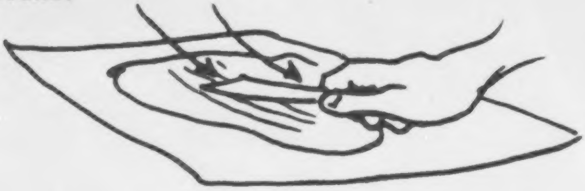
2. Spread the glazing compound on a piece of cardboard or kraft paper.



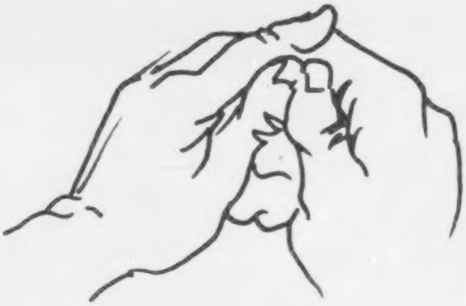
3. Place small amounts of the desired tinting color(s) on the glazing compound.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
4. Use a putty knife to work the tinting color into and through the glazing compound.	



5. Thoroughly mix the color through the glazing compound, remove the compound from the surface and work the ball of compound in the hands.	



OBPERATION SHEET
SC-3-17

COMPETENCY: Fill Nail Holes with Putty Using Putty Knife

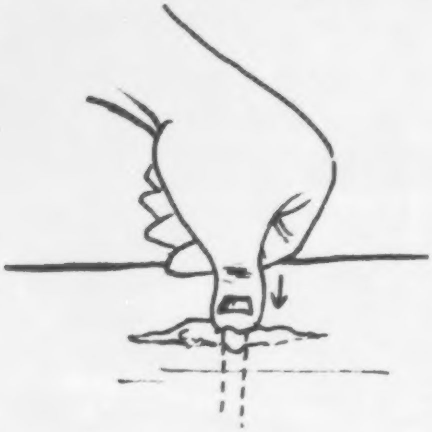
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to fill holes with putty properly allowing for putty shrinkage

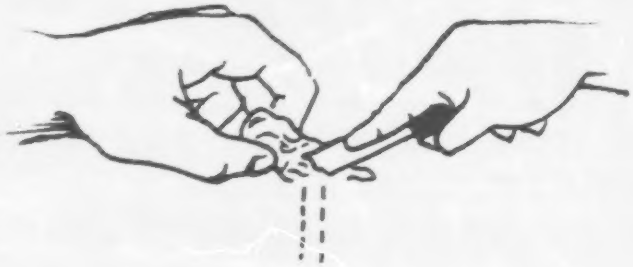
Page 1 of 1 page

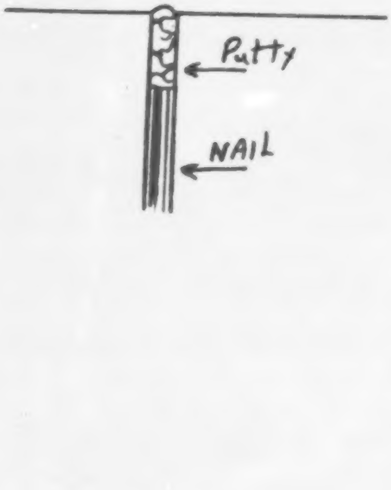
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Force or squeeze the putty into the nail hole with the thumb.



2. Put pressure on the putty and cut off the putty flush with the surface using a putty knife.





NOTE: The putty should be slightly convex to allow for slight shrinkage of the putty.

OPERATION SHEET
SC-3-18

COMPETENCY: Use a Pointed Putty Knife

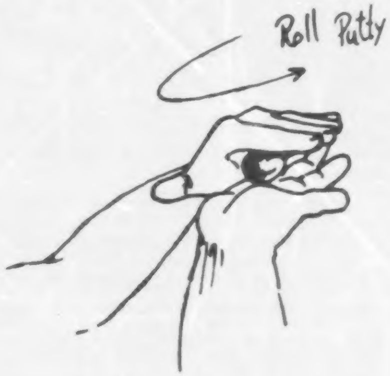
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to fill and smooth a small corner, crack or opening using a pointed putty knife

Page 1 of 1 page

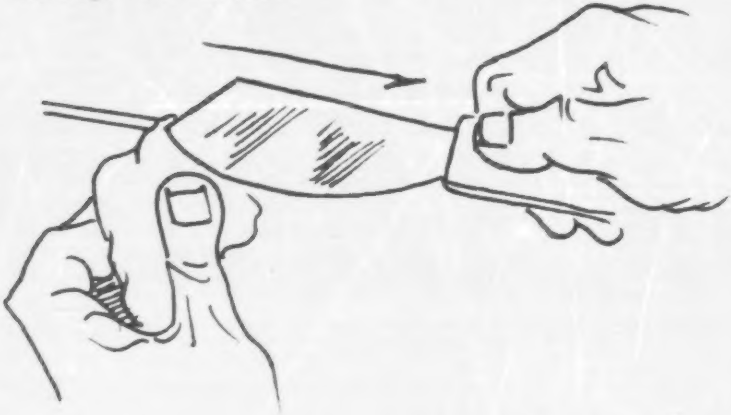
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Roll a ball of putty between the hands to warm and soften the putty.



2. Force the putty into the small crack or opening by using the point of the blade and working the putty ahead of the knife with one hand while working the putty into the opening with the putty knife held in the other hand.

3. Smooth the putty and form the putty into the corner by gently moving the blade through the corner.



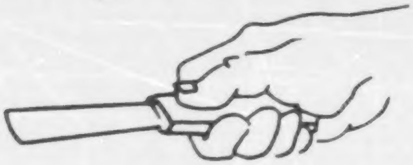
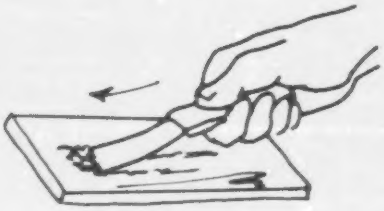
OPERATION SHEET
SC-3-19

COMPETENCY: Scrape Softened Coatings from Surfaces Using a Putty Knife

COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to cleanly remove softened coatings from a flat surface without gouging or scratching the surface

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Apply paint remover to the surface.	
2. Allow the coating to soften.	
3. Hold the putty knife with a firm grip at approximately a 15° to 20° angle to the surface. 	NOTE: Be sure the putty knife is squared and sharp without nicked edges.
4. Press steadily down with a forward motion. 	NOTE: Scrape in grain direction if scraping from wood.
5. Repeat this process until all coatings are removed from the surface.	

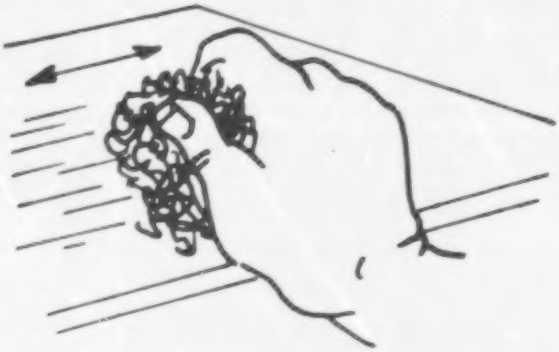
OPERATION SHEET
SC-3-20

COMPETENCY: Remove Softened Paint from a Surface with Steel Wool

COURSE: Painting and Decorating   UNIT III: Finishing

OBJECTIVE: The student will be able to remove a softened paint film from flat or curved surfaces

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Apply paint remover to the flat or curved surface.	
2. Allow the surface coating to soften.	
3. Use a pad of coarse grade steel wool to rub the surface in a back-and-forth motion.	NOTE: Follow the grain of the wood if cleaning wood.
	
	NOTE: When the steel wool fibres become clogged with paint, rearrange the steel wool pad so that a new cleaning area can be used.
4. Continue cleaning until the desired cleaning is complete.	NOTE: If a thin coating or film remains on the surface, apply another coat of remover and rub the surface with a fine grade steel wool.

OPERATION SHEET
SC-3-21

COMPETENCY: Scrape Paint from Curved Surfaces with Molding Scrapers

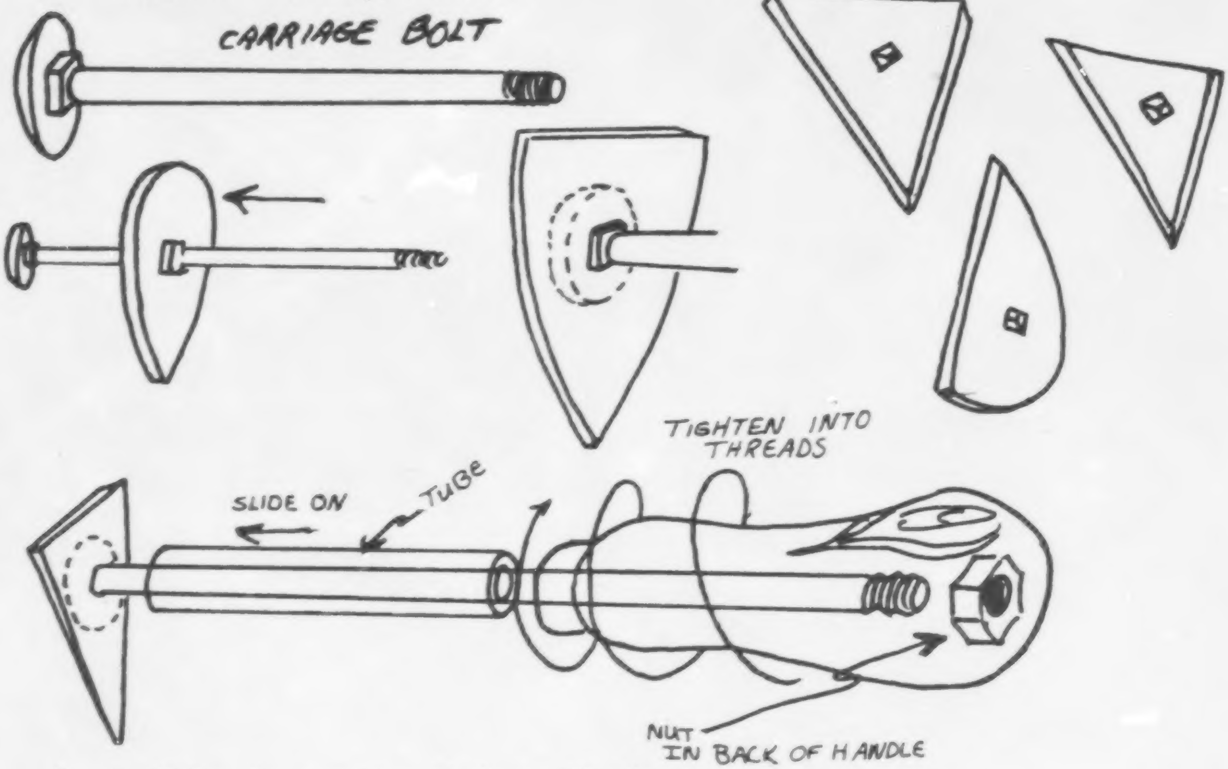
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to scrape paint from curved surfaces using various-shapes of molding scraper blades

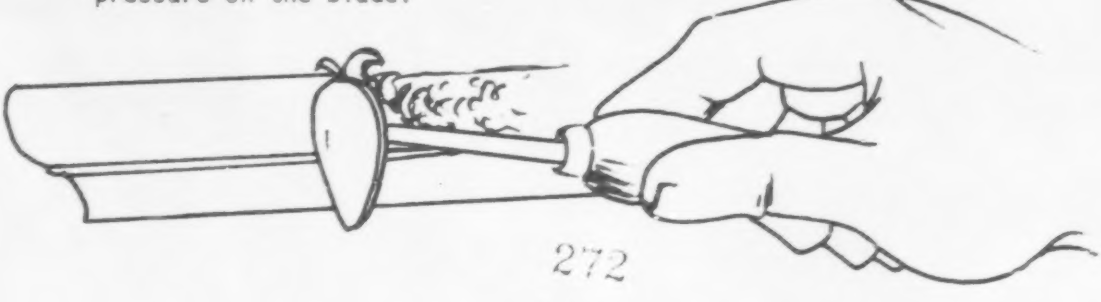
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

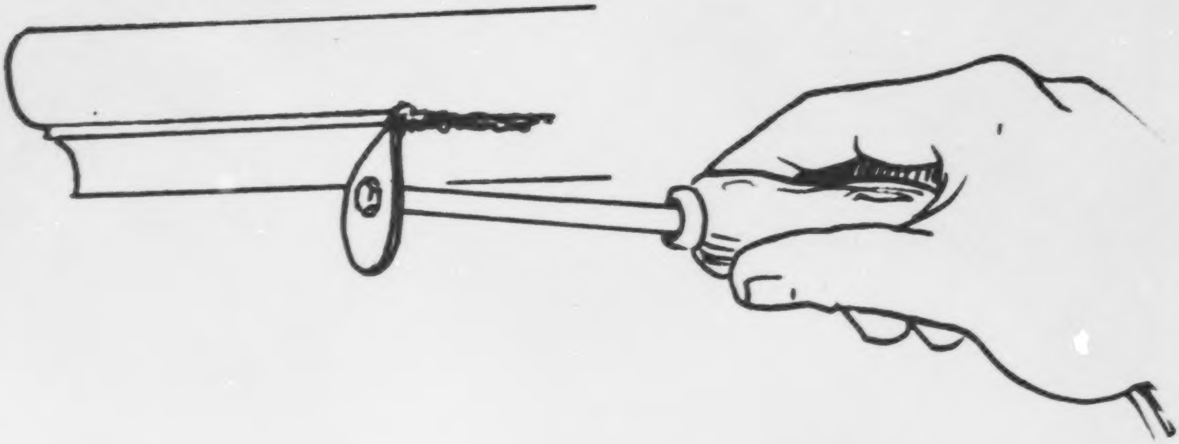
1. Attach the correctly shaped scraper blade to the scraper handle.


CARRIAGE BOLT
TIGHTEN INTO THREADS
SLIDE ON
TUBE
NUT IN BACK OF HANDLE

2. Position the scraping blade to fit the shape of the rounded surface and pull the blade over the surface with light pressure on the blade.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
3. Scrape small, narrow curved or grooved surfaces, by fitting the point of the blade into the groove and draw the point of the blade through the groove very lightly.	NOTE: Be sure the shape of the blade closely fits the shape of the surface to be scraped so that the surface does not become scored or "gouged."



OPERATION SHEET
SC-3-22

COMPETENCY: "Cut-In" The Exterior of a Window Sash

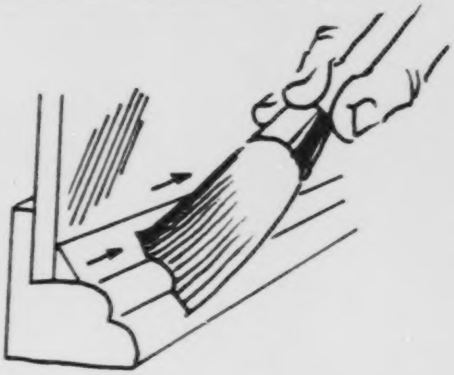
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to neatly "cut-in" a window sash by painting a straight line onto the glass and sealing the joint between the glazing and the glass

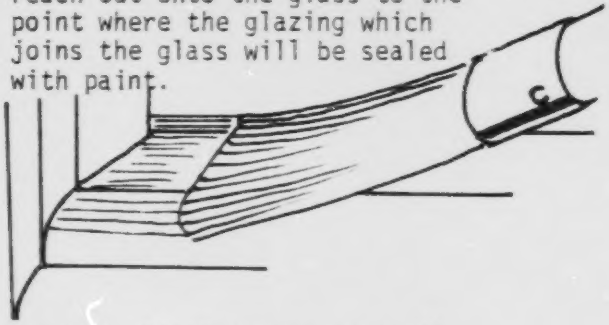
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Use a sash brush, load the brush and lay a bead of paint on the glazing.

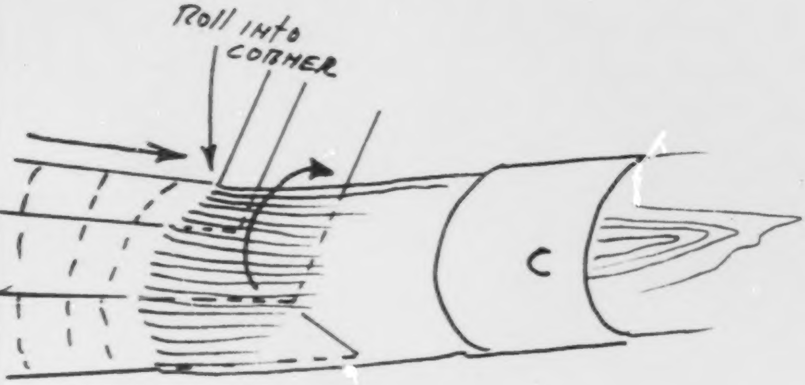


2. Start in one corner, placing the brush so that several bristles reach out onto the glass to the point where the glazing which joins the glass will be sealed with paint.



3. Use very little pressure on the brush, draw the brush along the glazing to the opposite corner.

NOTE: The opposite corner may be reached by slightly rolling the brush into the corner or by placing the brush into the corner and working the bristle from the corner.



OPERATION SHEET
SC-3-23

COMPETENCY: Cut Glass

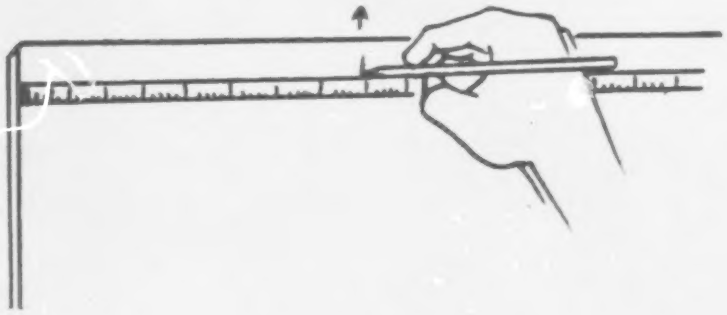
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to hold cutter and cut glass

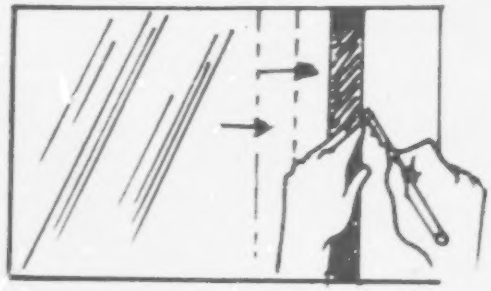
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

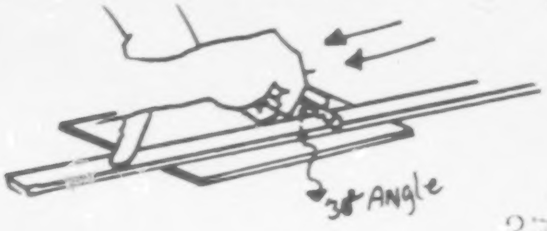
1. Measure and mark glass for cutting with a felt or a fine fiber tip marker.



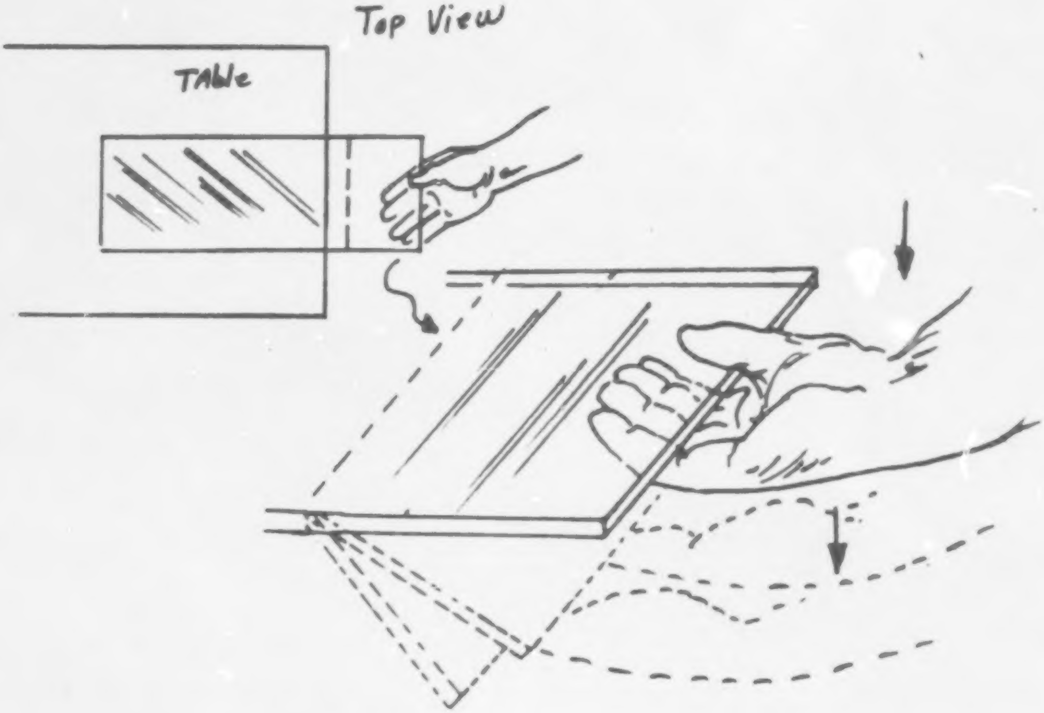
2. Position cutter wheel on measurement mark and slide edge of square to the cutter.



3. Set cutter at approximately 35^{0} angle and pull the cutter toward oneself the full width of the glass.



4. Slide the scored line on glass slightly over edge of working surface and snap glass by applying a firm quick downward pressure.



OPERATION SHEET
SC-3-24

COMPETENCY: Apply Bedding Glaze and Set Glass in Window Sash

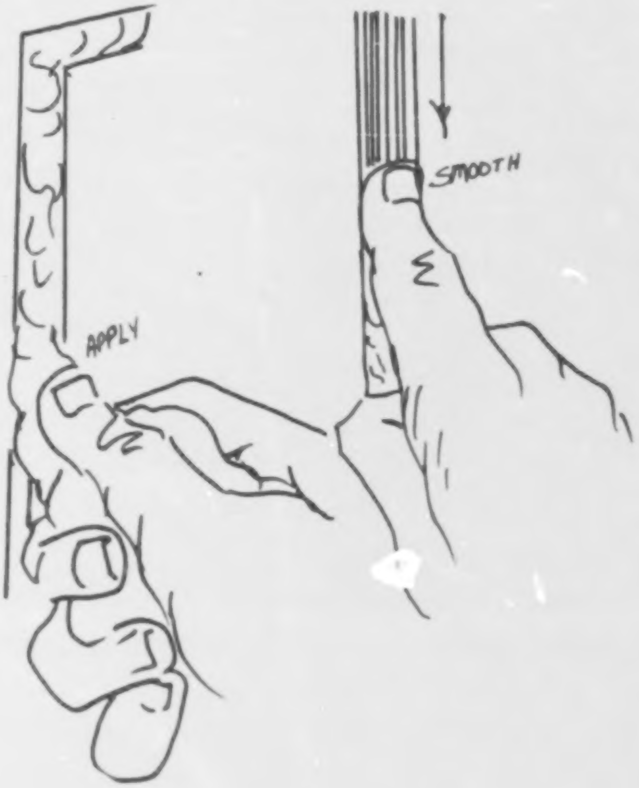
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to apply a uniform bead of glazing to the rabbet of a window sash; to bed and set the glass in the sash

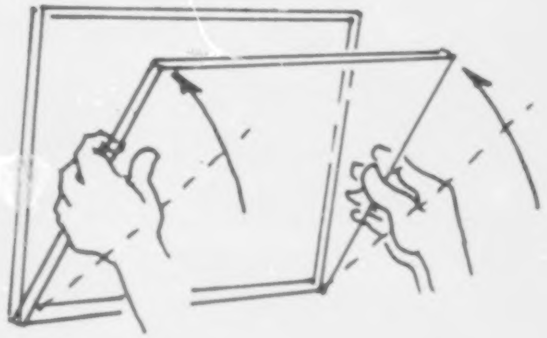
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Work a small amount of glazing compound between the hands to soften the compound.
2. Work the glazing into the rabbet around the entire frame with one hand.
3. Achieve a uniform thickness of glazing in the rabbet by smoothing the bedding glaze with a finger.

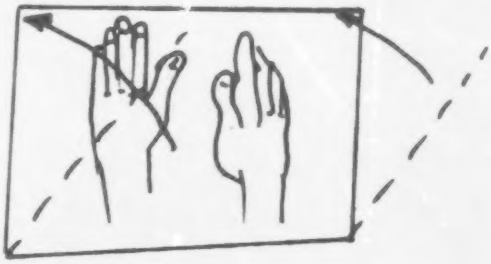


4. Grasp the glass on the sides and set the bottom edge of the glass in the bottom rabbet.

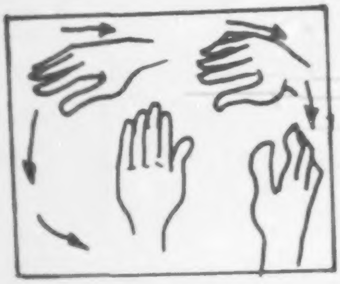


NOTE: Be sure the glass is positioned within the rabbet so that the sides of the glass do not strike the sides of the rabbet and break the glass.

5. Gently raise the top edge until the glass is resting in the rabbet and on the bedding glaze.



6. Hold the glass in place with one hand, and using the other hand to set the glass in the glazing, exert light pressure around the edges of the glass.



7. Gradually increase the pressure on the glass until the glass is completely bedded in the glazing and the inside edge of the rabbet is sealed.

OPERATION SHEET
SC-3-25

COMPETENCY: Install Glazing Points (Push Points)

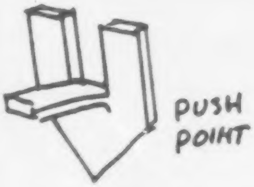
COURSE: Painting and Decorating UNIT III: Finishing

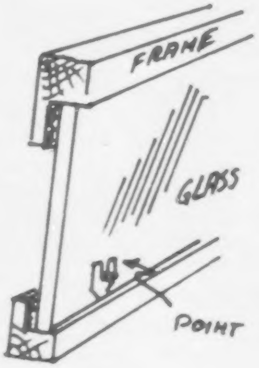
OBJECTIVE: The student will be able to install the correct number of glazing points when setting window glass

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

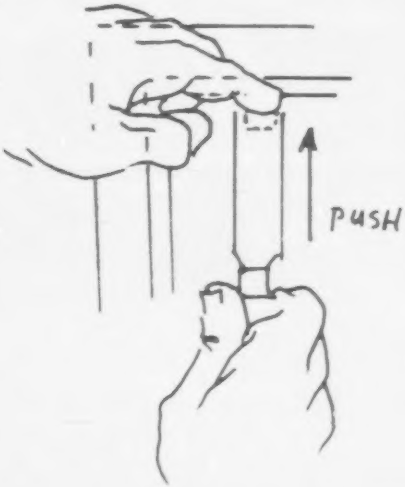
1. Position the push point at the point to be installed and holding the push point with the index finger of one hand, use a putty knife against the back edge of the push point tab.





2. Push the point into the sash until the tab is solidly against the side of the rabbet.

3. Install a glazing point around the rabbet at intervals of every 4" to 6".



OPERATION SHEET
SC-3-26

COMPETENCY: Glaze Window Sash with Putty Knife

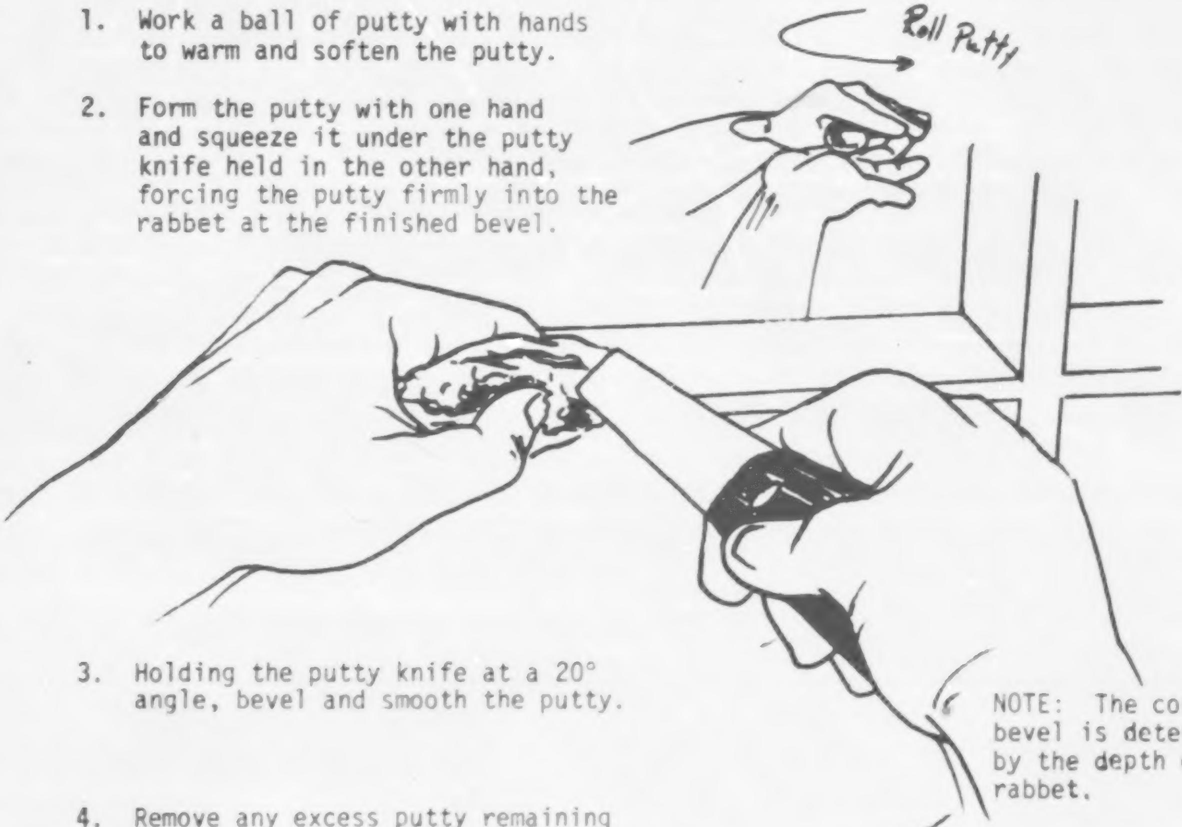
COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to glaze a window sash with putty knife

Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

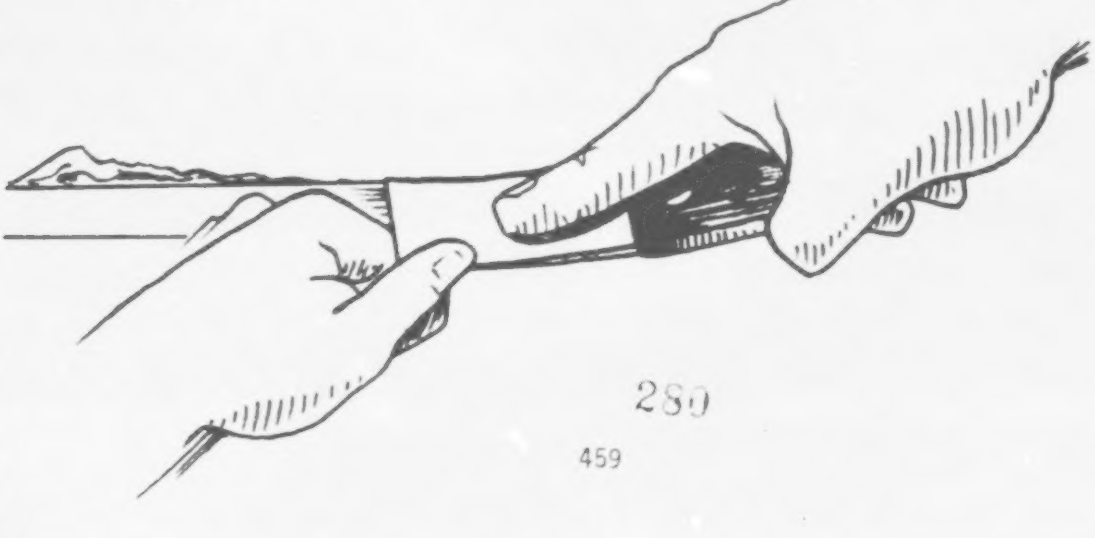
1. Work a ball of putty with hands to warm and soften the putty.
2. Form the putty with one hand and squeeze it under the putty knife held in the other hand, forcing the putty firmly into the rabbet at the finished bevel.



3. Holding the putty knife at a 20° angle, bevel and smooth the putty.

NOTE: The correct bevel is determined by the depth of the rabbet.

4. Remove any excess putty remaining on the glass at the top edge of the bevel.



OPERATION SHEET
SC-3-27

COMPETENCY: Remove Broken Glass and Clean Rabbet of Window Sash

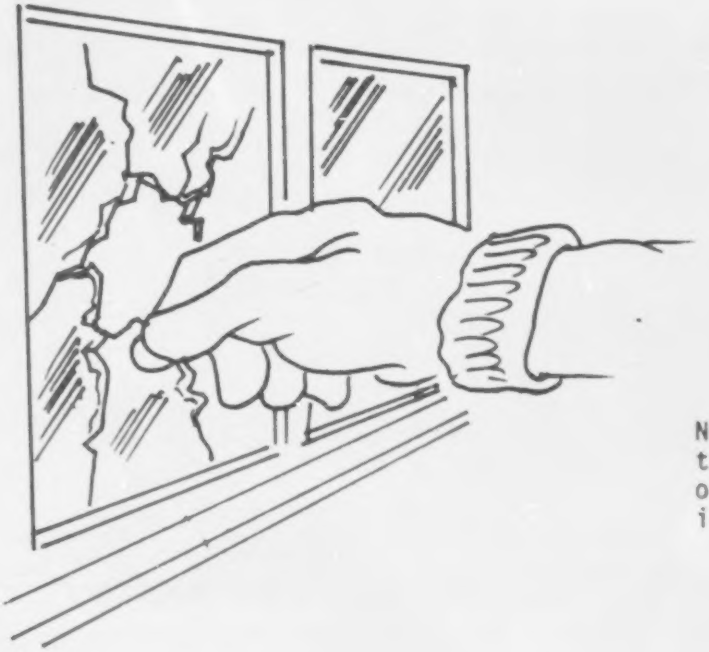
COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to remove broken glass safely from window sash and thoroughly clean the rabbet

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

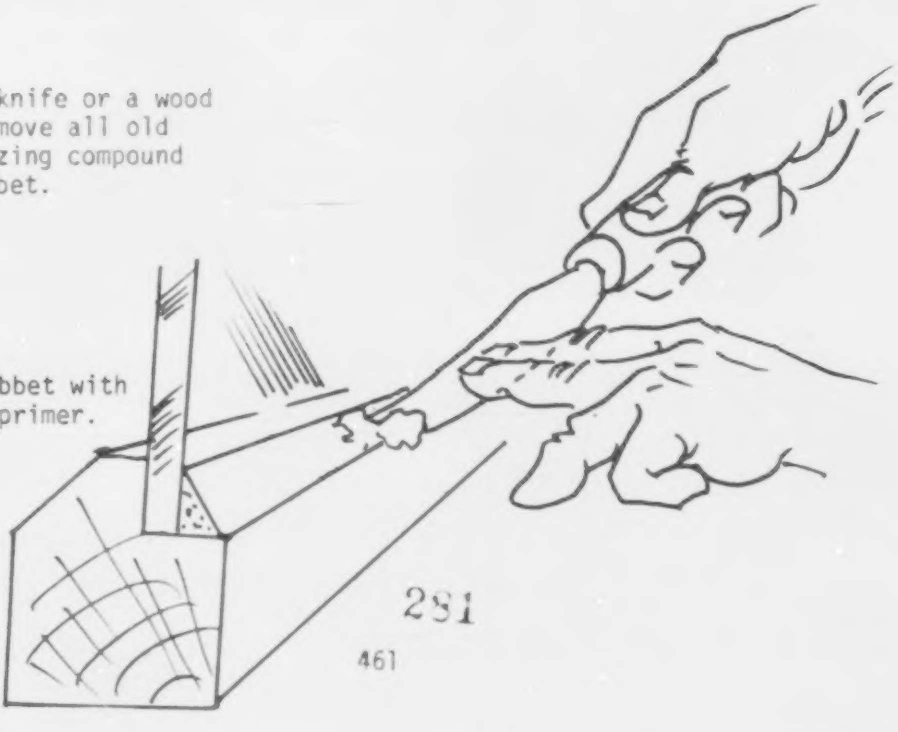
1. Wear a glove to remove the broken glass from the sash.



NOTE: The rabbet must be thoroughly cleaned of all old glazing or newly installed glass will break.

2. Use a putty knife or a wood chisel to remove all old putty or glazing compound from the rabbet.

3. Prime the rabbet with appropriate primer.



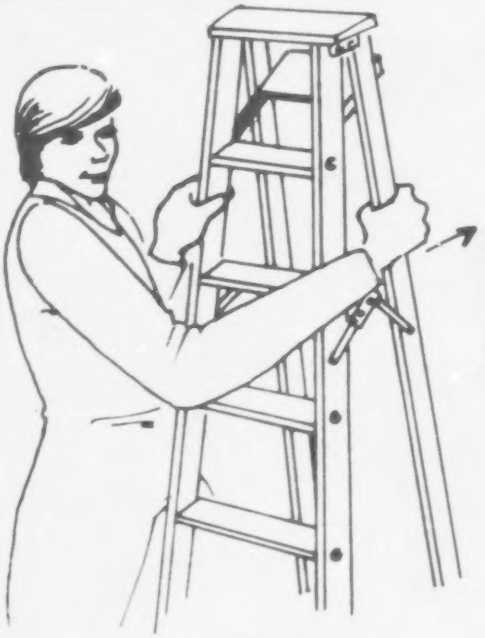
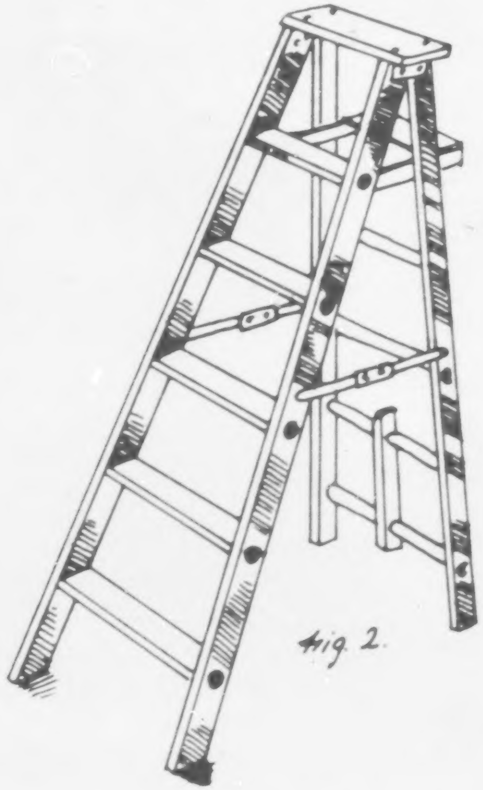
OPERATION SHEET
SC-3-28

COMPETENCY: Set Up and Use Step Ladders

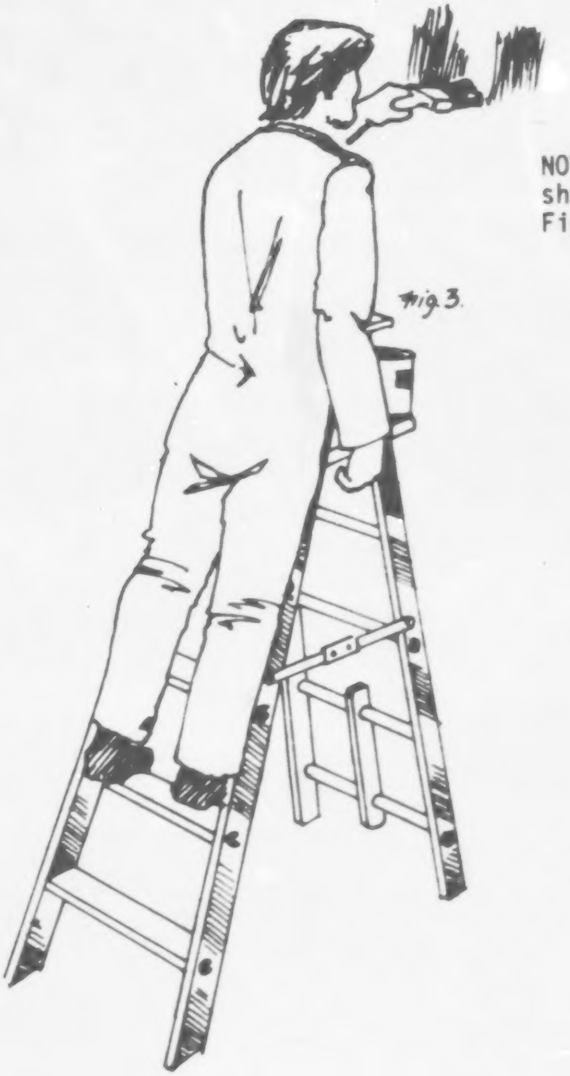
COURSE: Painting and Decorating — **UNIT III:** Finishing

OBJECTIVE: The student will be able to properly and safely set up a step ladder for work

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Hold the folded ladder with steps facing oneself and push the back away as far as possible. (Fig. 1)	 Fig. 1.
2. Push the spreaders down, lock them in position, and push the table or platform to the down position as in Figure 2.	 Fig. 2.

CAUTION: Never stand on the top of a step ladder!



NOTE: The workers paint pot should be placed on the platform. Fig. 3.

OPERATION SHEET
SC-3-29

COMPETENCY: Prepare Caulking Tube for Operation

COURSE: Painting and Decorating

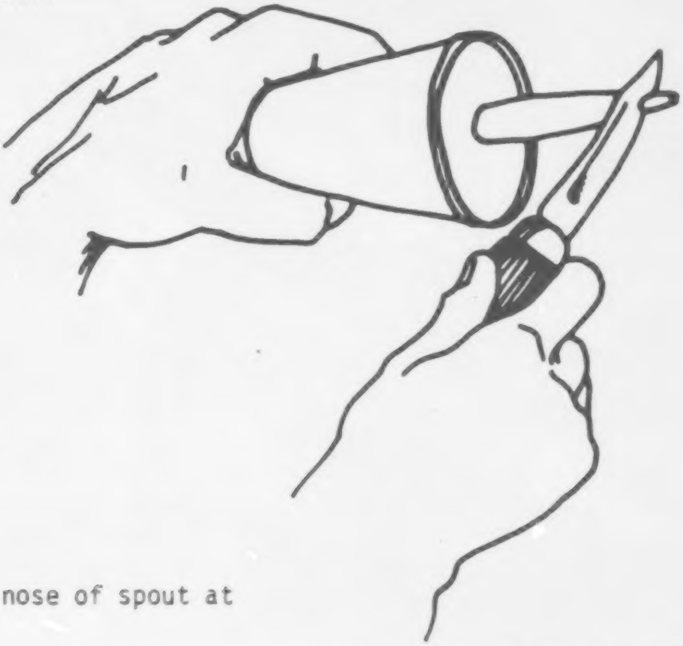
UNIT III: Finishing

OBJECTIVE: The student will be able to cut snout of tube and pierce the seal at snout end of tube

Page 1 of 2 pages

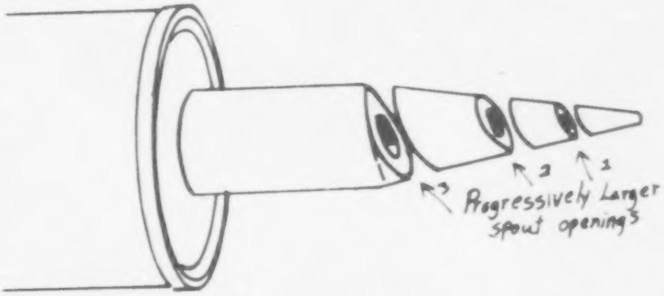
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold tube with one hand and knife with other.



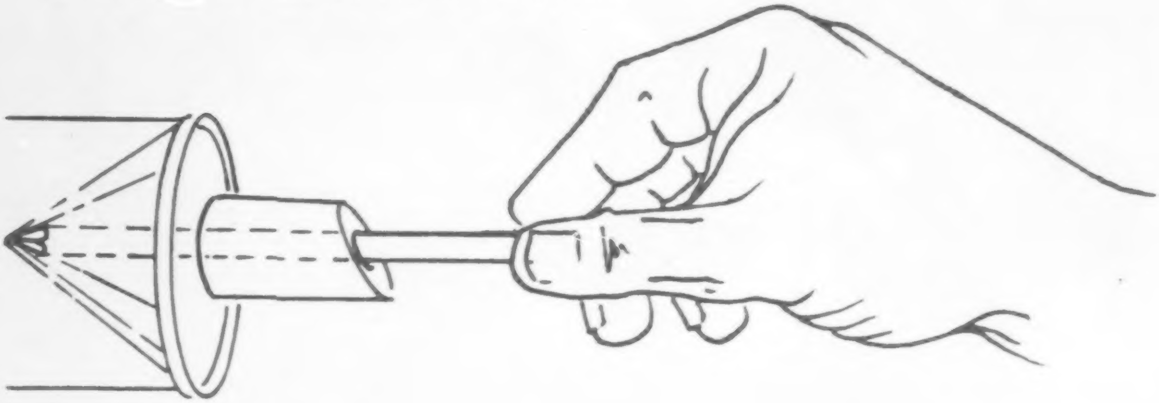
2. Cut "needle" nose of spout at a 45° angle

NOTE: The opening will be determined by how close to the tip the cut is made.



3. Push a pointed rod, whose diameter is small enough to slide through the hole in the snout end, down the snout until it ruptures the sealing membrane at tube end of the spout.

4. Insert the tube in the cartridge gun.



OPERATION SHEET
SC-3-30

COMPETENCY: Use a Caulking Gun

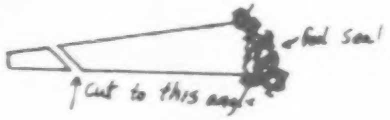
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to use the caulking gun to apply sealer in an efficient manner

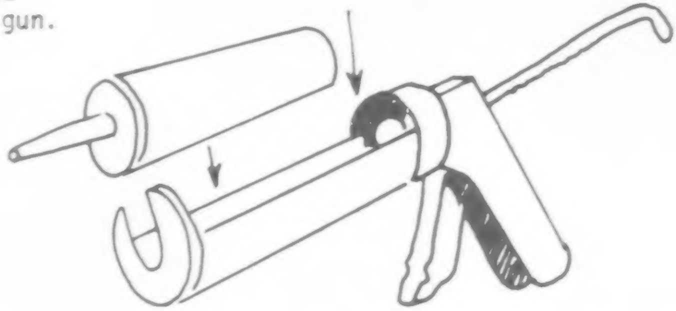
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

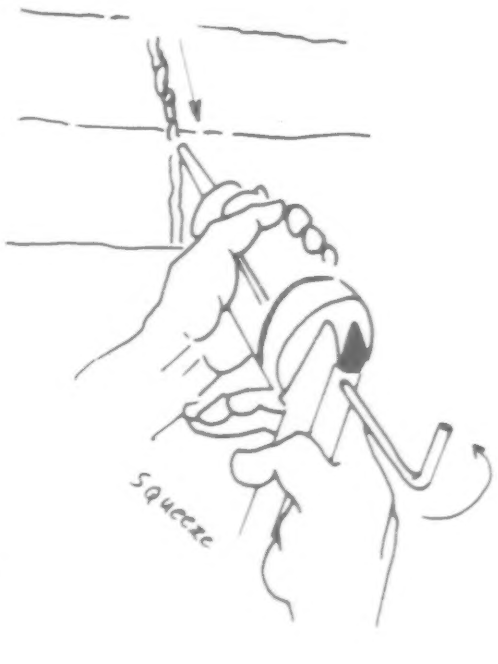
1. Clip off end of caulking tube spout on a slight angle allowing for the size of hole needed.
    a. Use a long wire to break the foil seal at rear of tube.



2. Reverse and pull back plunger handle on caulking gun.
3. Insert caulking tube cartridge back end first into caulking gun.



4. Release caulking gun plunger handle so that the plunger ratchets forward when caulking gun trigger is squeezed.
5. Continue squeezing trigger to produce correct flow of sealer.



6. Release plunger handle when done.

OPERATION SHEET
SC-3-31

COMPETENCY: Erect Extension Ladders (One Man)

COURSE: Painting and Decorating **UNIT III:** Finishing

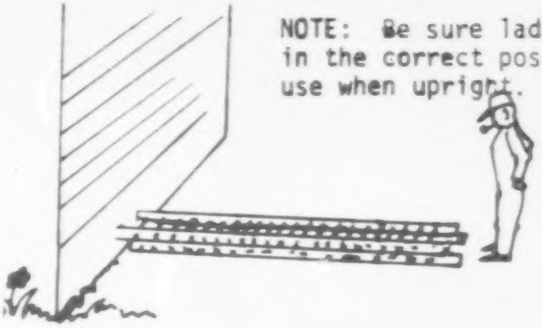
OBJECTIVE: The student will be able to erect extension ladders safely and securely

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

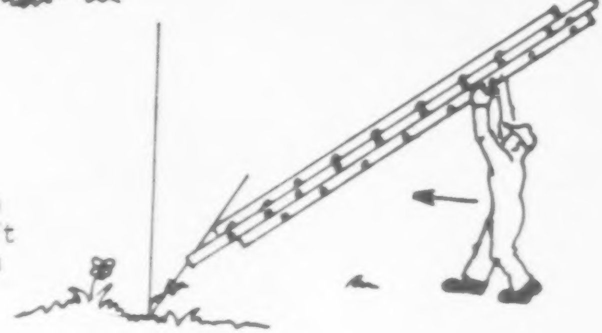
ONE MAN OPERATION

1. Place ladder in position, lying flat on ground with feet against building.

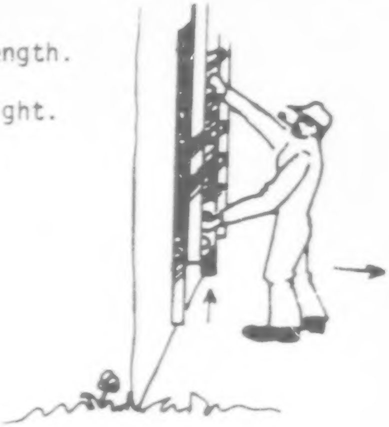


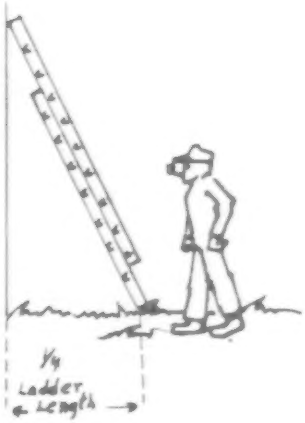
NOTE: Be sure ladder is in the correct position for use when upright.

2. Walk to the top end of ladder, grasp top rung and lift to chest height.
3. Raise to over-head-press-position and hand walk the rungs toward the building.



4. Hold ladder against building in vertical position and reaching with upper hand down to second rung, lift and pull bottom of ladder away from building.
5. Set ladder in desired position so length between object and ladder is approximately 1/4 extended ladder length.
6. Extend ladder to desired working height.
7. Check working angle with ground and foot comfort being sure feet are solid and ladder is set straight.





SAFETY NOTE: Never block up one ladder leg if the higher leg can be dug into the ground.

OPERATION SHEET
SC-3-32

COMPETENCY: Erect Extension Ladders (Two Man)

COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to erect extension ladders safely and securely

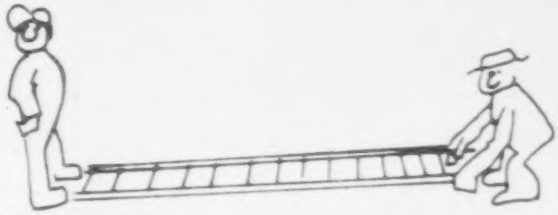
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

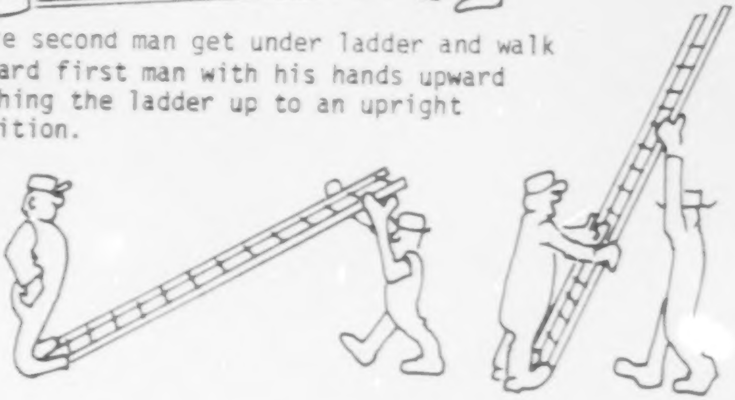
TWO MAN OPERATION

1. Stand one man on the lower end of the ladder rails.

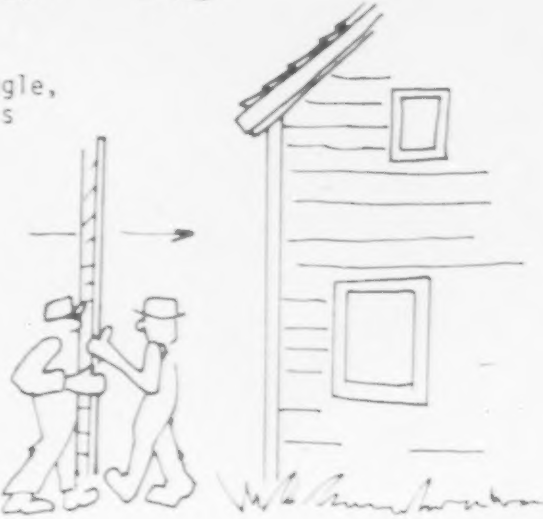
2. Have second man lift upper end of ladder.

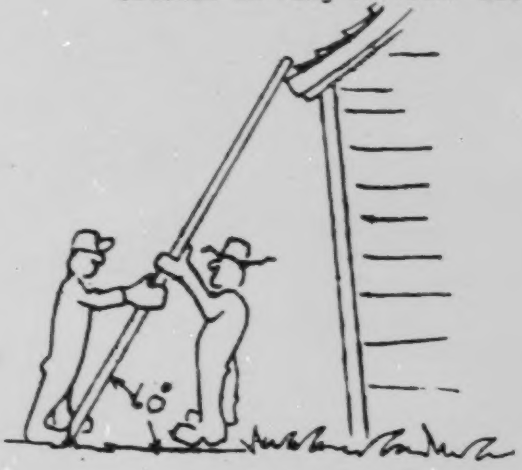


3. Have second man get under ladder and walk toward first man with his hands upward pushing the ladder up to an upright position.



4. Set ladders against building at 60^0 angle, square against building with both rails set firmly and evenly on the ground.



COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
5. Achieve proper height by having man #2 push the ladder out away from building slightly while man #1 raises upper section to proper height.	NOTE: When upper section is lowered on latch be sure latch catches on rung of lower section.  NOTE: After ladder is raised, readjust lower end position to re-establish 60° angle from building.

OPERATION SHEET
SC-3-33

COMPETENCY: Carry Ladder in Upright Position

COURSE: Painting and Decorating

UNIT III: Finishing

OBJECTIVE: The student will be able to carry an extension ladder upright

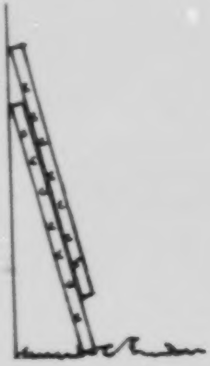
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS
The student will be able to:

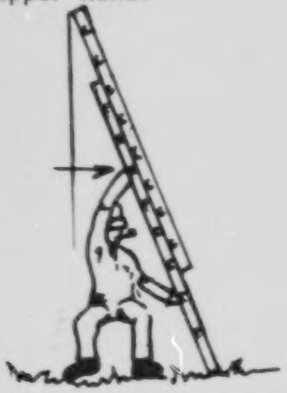
TEACHING/LEARNING ACTIVITIES

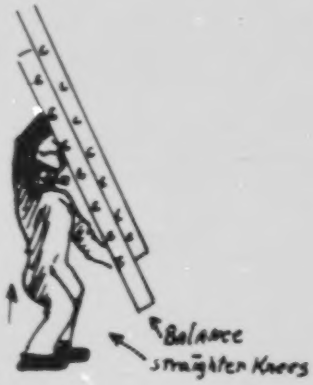
ONE MAN OPERATION

1. Lower ladder to lowest possible position while in upright position.
2. Walk under the ladder in a direction parallel to the building.
3. Bend the knees slightly, grasp a low rung with the arm closest the ladder.
4. Stretch other arm in a comfortable reach to rung overhead.
5. Hold ladder in with lower hand while pushing out with upper hand.

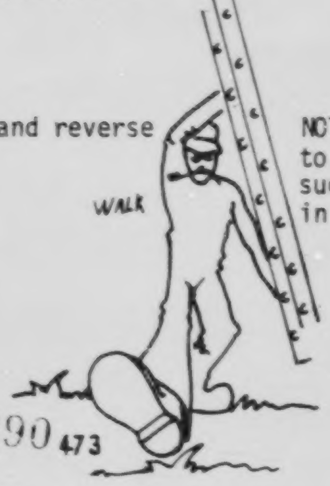


NOTE: When ladder comes into its balance, straighten knees.





6. Walk to desired position and reverse procedure.



NOTE: Check before moving ladders to be sure there are no obsticals such as limbs or electrical wires in the way.

OPERATION SHEET
SC-3-34

COMPETENCY: Erect a Ladder Jack Scaffold

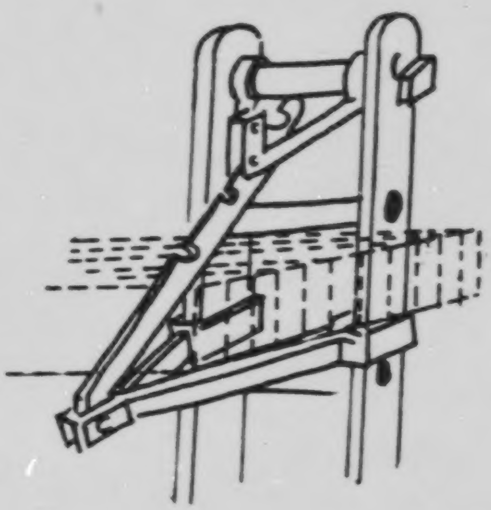
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to erect a sturdy and safe ladder jack scaffold

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Climb ladder with a ladder jack and hook the lower hook over the ladder rung at the level desired for scaffold planks.



2. Hook the upper hook over a ladder rung and side rail two rungs above lower hook.

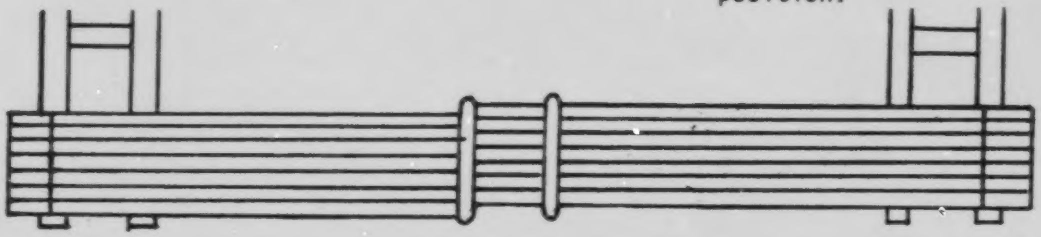
3. Adjust upper arm through upper hook until lower arm is level, making sure hook is securely engaged.

4. Place the ladder jack on the second ladder.

NOTE: Some ladder jacks hook over the side rails of the ladder.

NOTE: Be sure to place the jack at the same height as the jack on the first ladder so that the platform extended between the two jacks will be in a level position.

5. Open the extension plank to a point where the ends of the plank extend a few inches past the outside beams of the two ladders.



6. Carry the extended plank up the ladder and place the plank on the bottom bracket of the ladder jacks.

NOTE: The plank should extend at least 6 inches beyond the bottom bracket of each jack.

OPERATION SHEET
SC-3-35

COMPETENCY: Mount and Dismount Outside Ladder Jack Plank from Right Ladder

COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to safely mount and dismount a ladder jack plank scaffold

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS
The student will be able to:

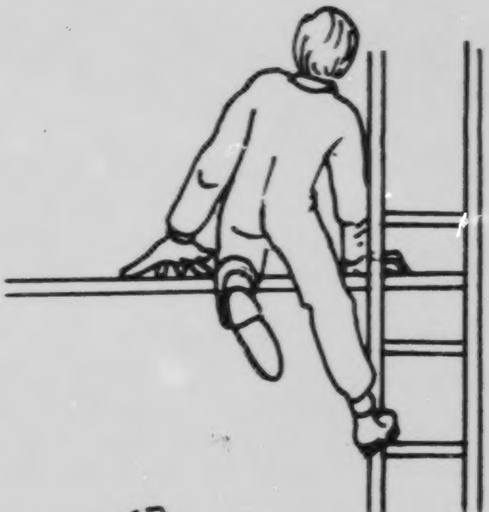
TEACHING/LEARNING ACTIVITIES

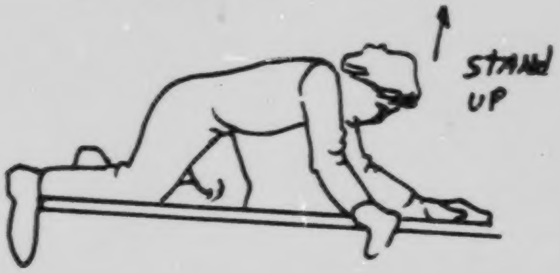
---

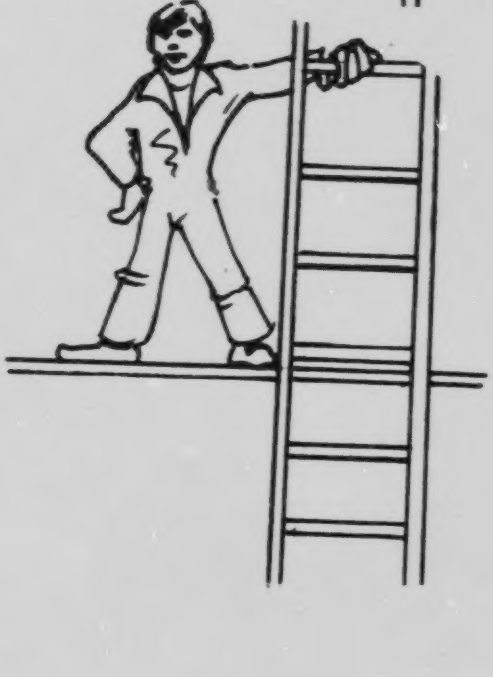
1. Climb a ladder with hands on side beams.

2. Mount the plank on the side toward the middle of the other ladder.

   A. Climb up ladder until head is just under plank.
   B. Reach over jack and plank with right arm and grasp far beam.
   C. Grasp plank to the left, reaching out a comfortable distance of 24"- 30".
   D. Climb up over plank placing left knee on plank.
   E. Pull right leg onto plank.
   F. Stand up from this position holding onto ladder for balance.







OPERATION SHEET
SC-3-36

COMPETENCY: Use Pot Hook

COURSE: Painting and Decorating

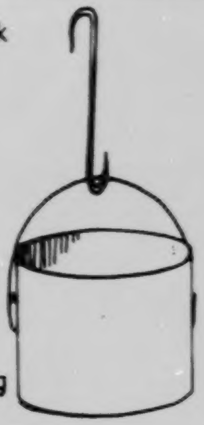
UNIT III: Finishing

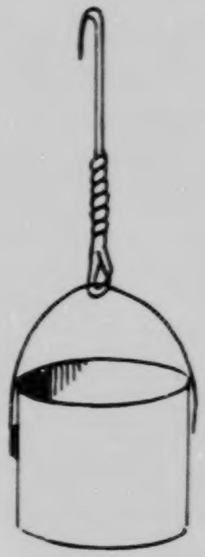
OBJECTIVE: The student will be able to properly use the pot hook

Page 1 of 1 page

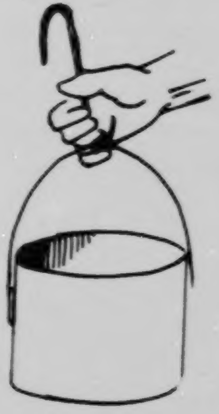
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place work pot handle in the hook as per Fig. 1 or Fig. 2.

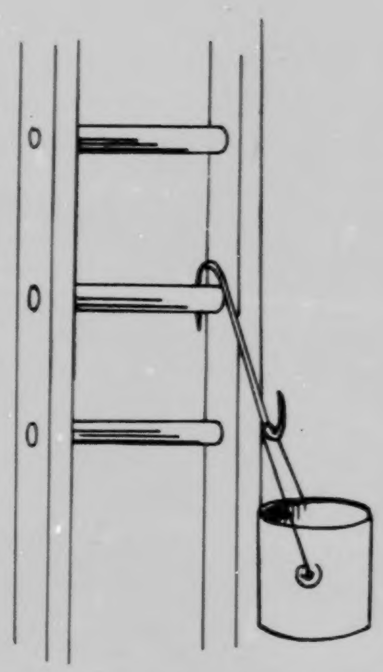




2. Carry the work pot grasping pot hook in the hand and hooking the little finger under the pot handle as in Fig. 3.



3. Hang the pot hook over the front of the ladder beam onto the rung at the appropriate level as in Fig. 4.



OPERATION SHEET
SC-3-37

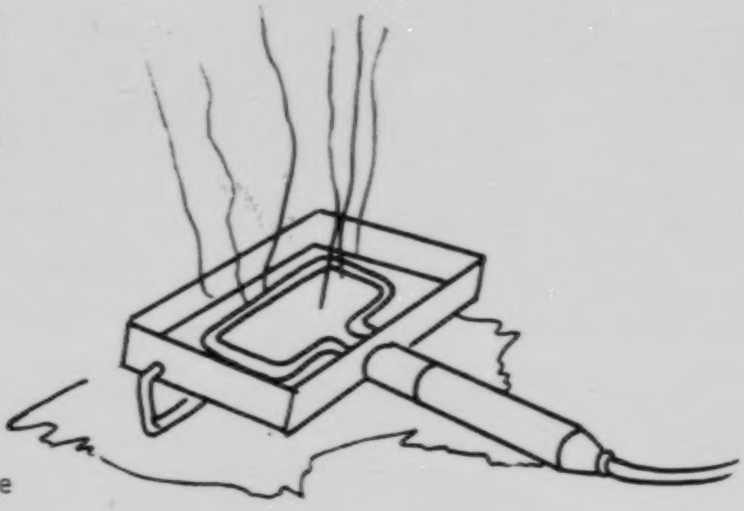
COMPETENCY: Operate Electric Paint Remover

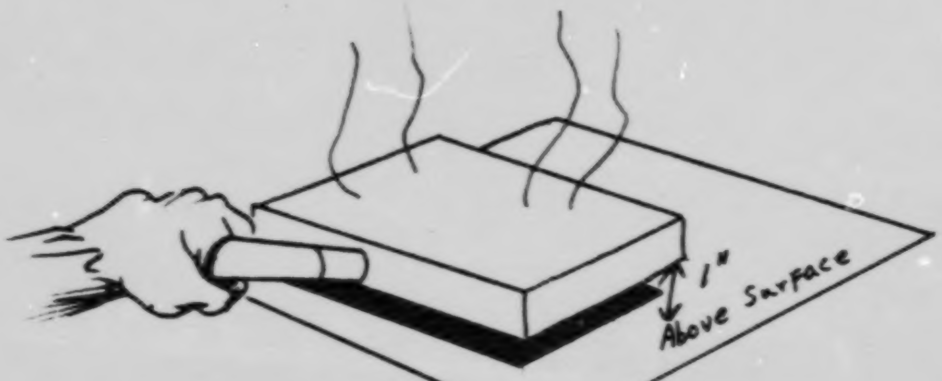
COURSE: Painting and Decorating

UNIT III: Finishing

OBJECTIVE: The student will be able to remove paint electrically

Page 1 of 2 pages

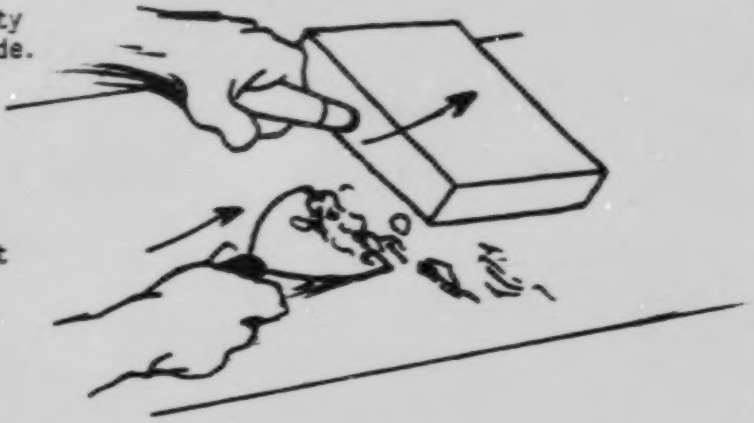
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Plug the power cord into the outlet.	NOTE: If an extension cord is needed be absolutely sure the wire gage is adequate for the wattage rating of the heating unit (i.e. #14 wire for 1000 watts and #16 wire for 800 watts etc.)
2. Set the heater on its stand while heating up. 3. Observe the heating element glow red as it reaches peak heating efficiency.	
4. Hold the heater close to the painted surface.	



NOTE: Heater should face the painted surface with cover toward operator. About 1" is a good starting point for a 1000 watt unit.

5. Use the other hand to hold putty or any broad knife up to 3" wide.

6. Wait for paint to blister or bubble up, then move the heater forward to heat the next area to be removed, and use the broad knife to push the blistered paint from the surface just heated.



OPERATION SHEET
SC-3-38

COMPETENCY: Light a Torch

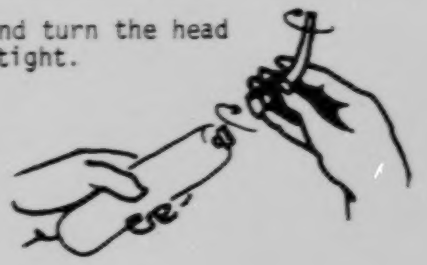
COURSE: **Painting and Decorating** UNIT III: **Finishing**

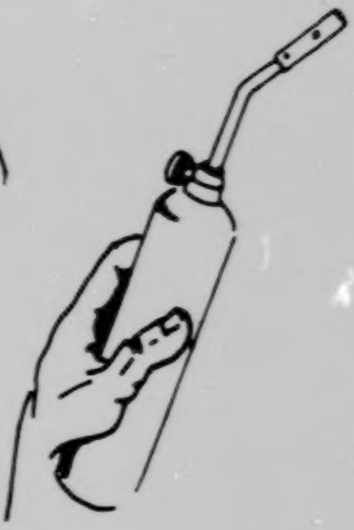
OBJECTIVE: The student will be able to properly light a propane torch in a safe and efficient manner

Page 1 of 2 pages

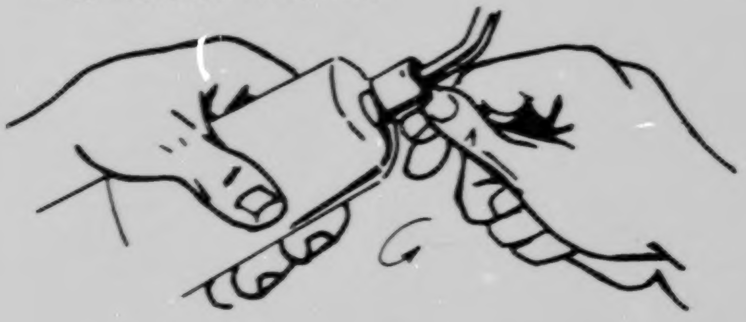
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Put the head on the torch and turn the head clockwise until it is hand tight.



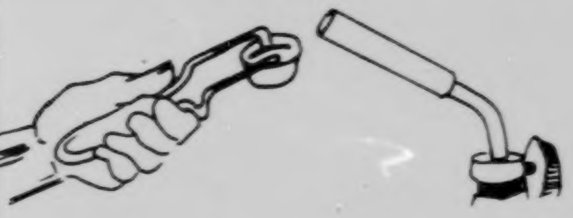


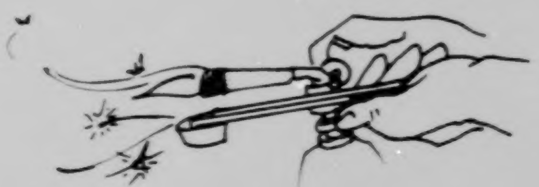
2. Turn the flame adjusting screw about ½ turn counterclockwise.

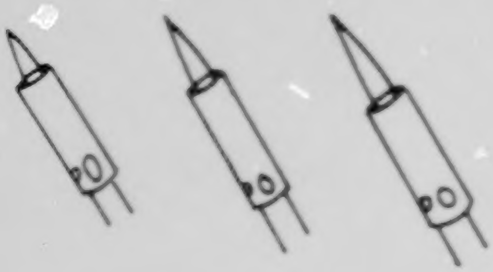


3. Light a match and hold it about ¼" from the head of the torch.

CAUTION: DO NOT get the fingers directly in front of the torch tip when lighting it or after it is lit.





COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
4. Have the torch lit, then turn the flame adjusting screw in either direction until the desired flame is reached. 	
5. Turn the torch off, by turning the flame adjusting screw clockwise until it is tight.	CAUTION: The neck of the torch remains hot for a while after the torch is turned off so be careful not to touch it. NOTE: The flame will keep burning for about 5 seconds.

OPERATION SHEET
SC-3-39

COMPETENCY: Remove Paint with a Propane Torch

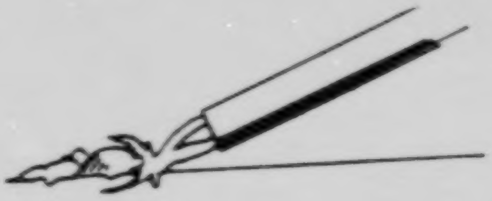
COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to properly remove paint with a propane torch observing all Safety Rules

Page 1 of 1 page

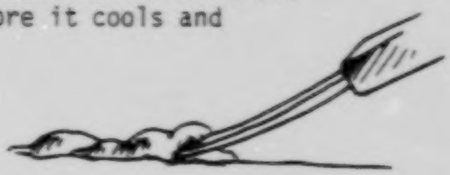
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Apply the flame to the painted surface at approximately a 30° angle.

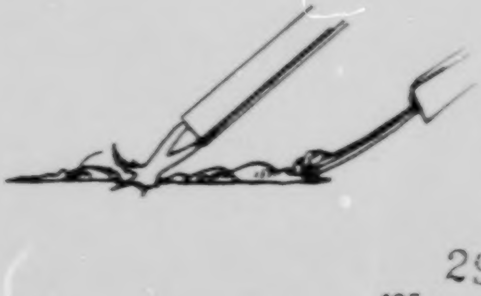


NOTE: The paint which is being heated will blister or bubble up as the paint film heats and softens.

2. Use a 3 or 4 inch broad knife to remove softened paint before it cools and hardens.



3. Burn or remove paint with heat by removing softened paint from one area and heating the next area, work from left to right or right to left as preferred.



SAFETY:

1. Never remove paint with an open flame on the windward side of the building.

2. Renail loose boards and caulk cracks and splits before starting to burn off paint.

3. If paint being removed is lead base-wear a Bureau of Mines respirator during burning and sanding operation.

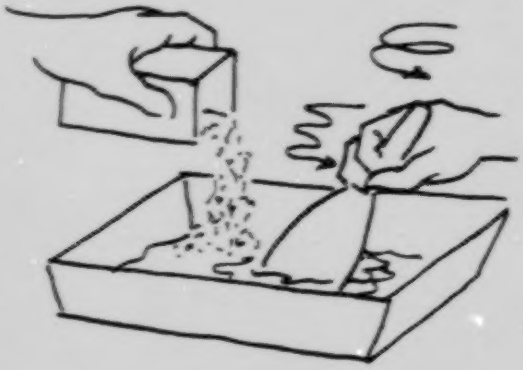
OPERATION SHEET
SC-3-40

COMPETENCY: Mix Powdered Joint Compound

COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to uniformly mix the powdered joint compound to the proper working consistancy

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Place a small amount of water into a mixing pan.	
2. Very slowly pour the powdered joint compound into the water while constantly mixing with a broad knife.	NOTE: Adding the joint compound to the water too rapidly will result in dry lumps of compound forming in the mixture.
3. Add the compound to the water until the consistency of the mixture will allow the compound to be held on an inverted broadknife.	

OPERATION SHEET
SC-3-41

COMPETENCY: Tape and Finish Wallboard

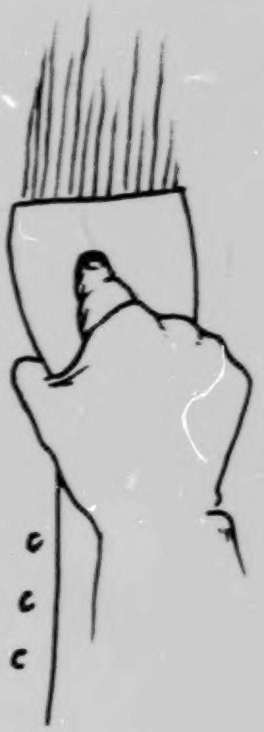
COURSE: Painting and Decorating — UNIT III: **Finishing**

OBJECTIVE: The student will be able to properly and neatly finish wallboard joints

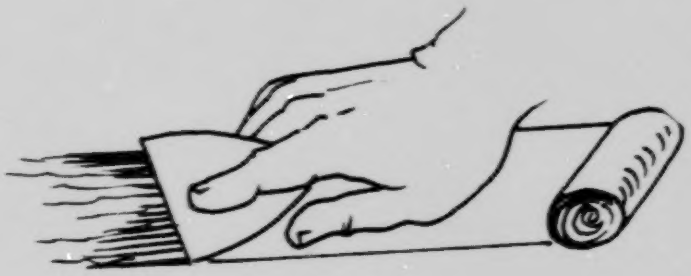
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Use a 4" or 6" broad knife to spread the joint compound to a thickness of 1/16" over the joint and at least 2" from each side of the joint.



2. Center the tape over the joint of the wallboard, using moderate pressure, draw the broadknife over the tape so that the tape is completely embedded in the compound and wipe the joint lightly removing excess compound and "feathering" the taped edges.



OPERATION SHEET
SC-3-42

COMPETENCY: Tape and Finish an Inside Wallboard Corner with a Corner Taping Trowel

COURSE: Painting and Decorating **UNIT III:** Finishing

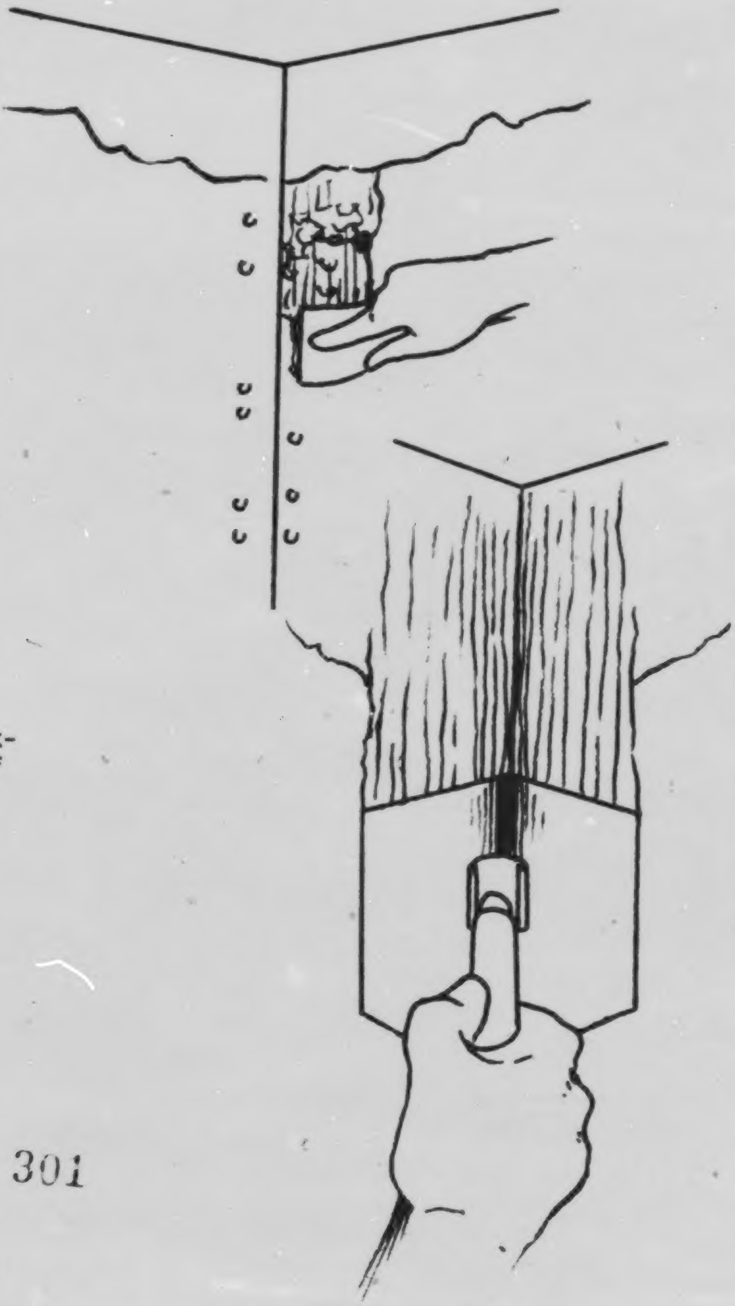
OBJECTIVE: The student will be able to properly and neatly finish an inside wallboard joint with a corner taping trowel

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS
The student will be able to:

TEACHING/LEARNING ACTIVITIES

1. Apply a 1/16" thickness of joint compound to each side of the corner using a 4" braodknife and spread the compound at least 2" from the corner.



2. Use the corner taping trowel and smooth the joint compound by applying light pressure to the trowel to achieve a uniform thickness of compound on both sides of the corner.

COMPETENCE - PROCEDURES/STEPS

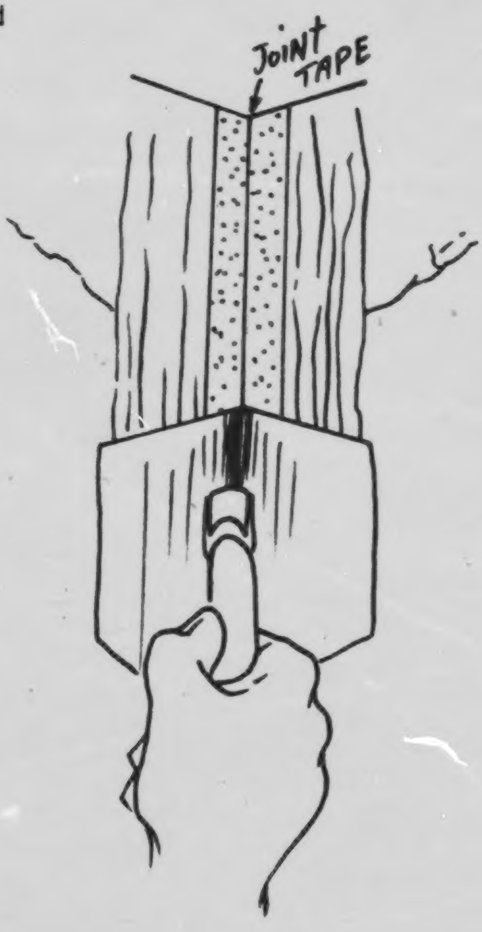
TEACHING/LEARNING ACTIVITIES

3. Cut a strip of joint tape the length of the corner.

4. Crease or fold the tape in the center along the entire length of tape with a folding tool.

5. Start at the top of the corner and fit a section of the folded tape squarely into the corner, placing the corner taping trowel over the tape and drawing the trowel down the corner with enough pressure to bed the tape into the compound.

NOTE: Too much pressure on the trowel will force all the compound out from under the tape.



OPERATION SHEET
SC-3-43

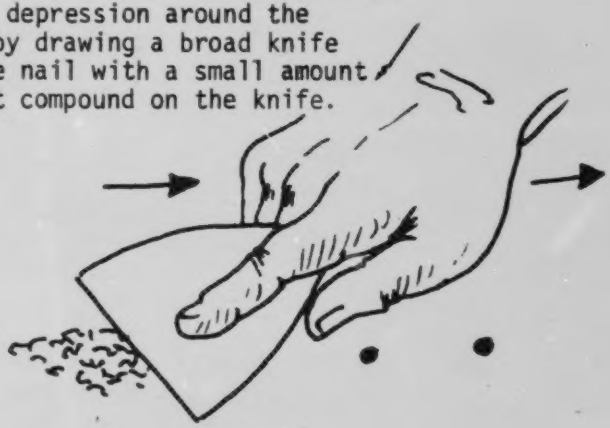
COMPETENCY: Cover or "Spot" Wallboard Nails

COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to efficiently cover all wallboard nails

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Cover or "spot" all wallboard nails and the depression around the nails, by drawing a broad knife over the nail with a small amount of joint compound on the knife.	



OPERATION SHEET
SC-3-44

COMPETENCY: Finish an Outside Wallboard Corner

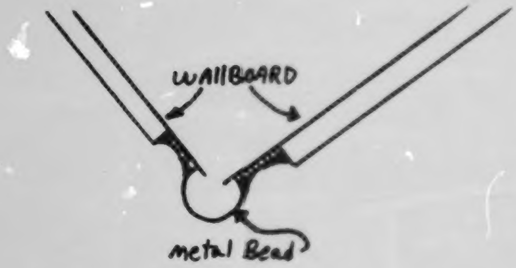
COURSE: Painting and Decorating

UNIT III: Finishing

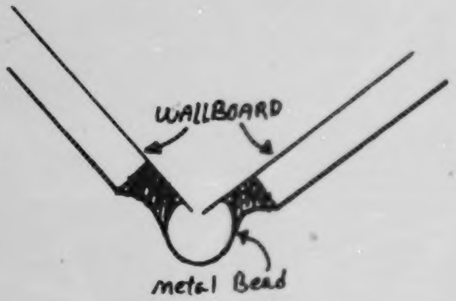
OBJECTIVE: The student will be able to properly fill the void between the metal bead and wallboard making a neat finished outside wallboard corner

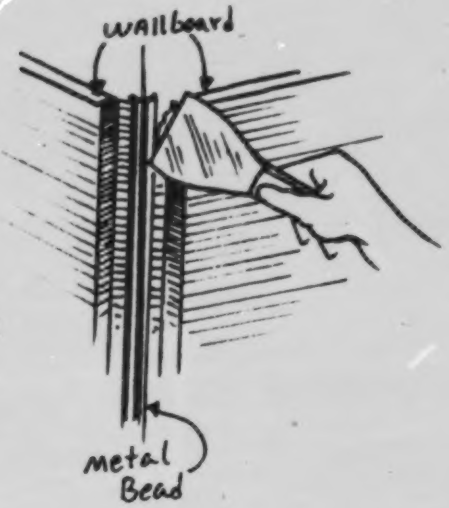
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Use a trowel or broad knife to apply first coat of joint compound to corner.	NOTE: The metal bead will act as a guide on one side while the wallboard guides the other.

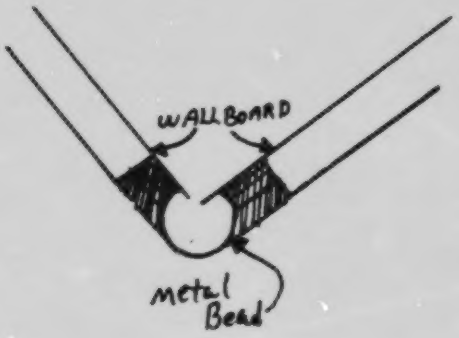


COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
2. Apply another coat of joint compound with trowel or broad knife as in step 1.	NOTE: The compound is building up between the metal bead and the wallboard surface.





COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
3. Apply a third coat as in steps one and two fill the remaining void between the bead and wall.	NOTE: Care must be taken to keep the compound feathered out on the surface of the wallboard.



OPERATION SHEET
SC-3-45

COMPETENCY: Spackle a Wall with a Broadknife

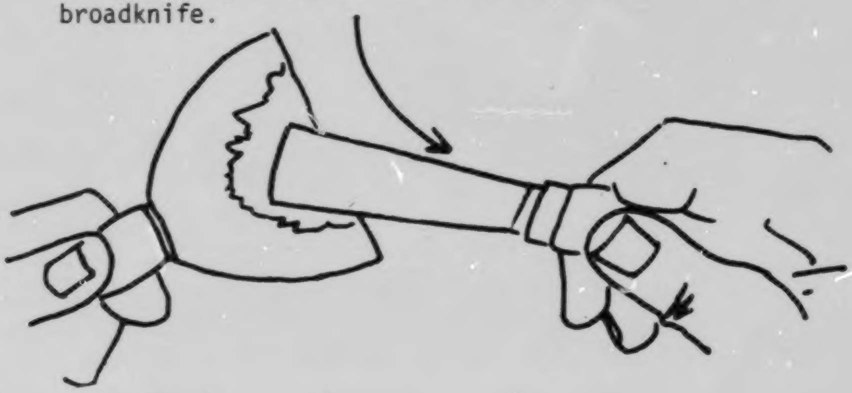
COURSE: Painting and Decorating **UNIT III: Finishing**

OBJECTIVE: The student will be able to smooth surfaces with spackling compound and a broadknife

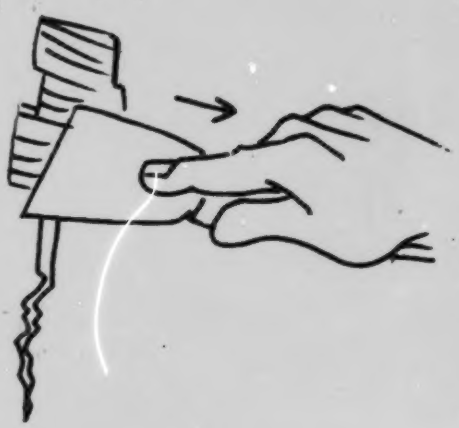
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

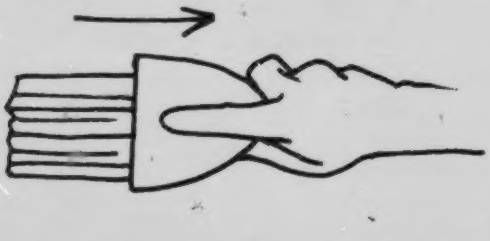
1. Use a putty knife to place a small amount of spackling material on the blade of the broadknife.



2. Draw the broadknife firmly across the defective surface to completely fill the surface depression.



3. Fill the surface depression, then draw the broadknife across the depression in the opposite direction to smooth the spackle and "feather" out the edges.



OPERATION SHEET
SC-3-46

COMPETENCY: Use a Triangular Trowel to Spackle Walls

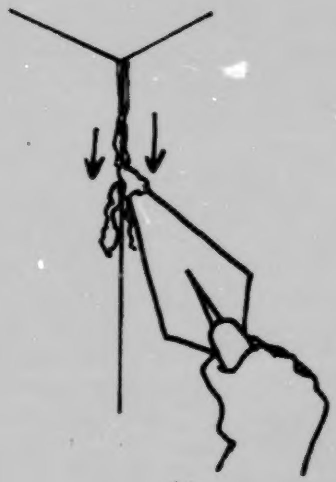
COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to patch and smooth wall surfaces using a triangular trowel

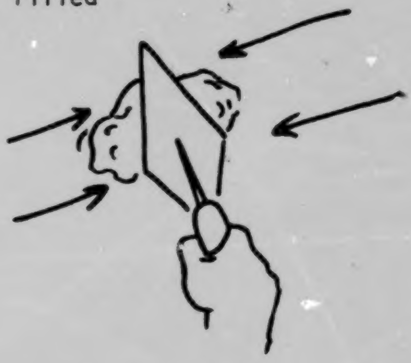
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Fill and smooth inside corners by placing a small amount of spackling material on the point of the trowel, and drawing trowel point through the corner several times until the corner is filled and smooth.



2. Fill and smooth flat surface defects by putting a small amount of spackling material on one side of the trowel and placing the trowel against the wall at approximately a 15° - 20° angle to the wall, draw the trowel across the area to be patched several times until the area is filled and smoothed.



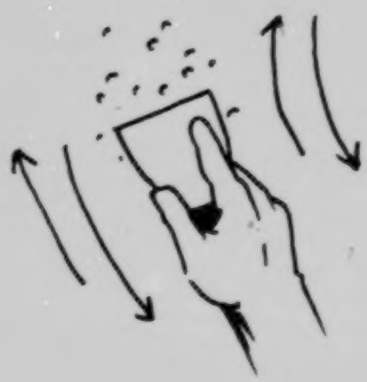
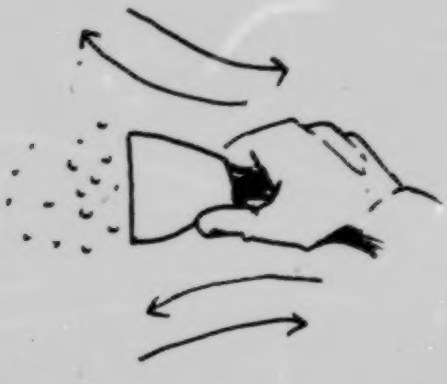
OPERATION SHEET
SC-3-47

COMPETENCY: Knife a Surface with a Broadknife

COURSE: Painting and Decorating UNIT III: Finishing

OBJECTIVE: The student will be able to remove foreign materials or particles from surface by "knifing" the surface with a broadknife

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Scrape the surface by holding a broadknife at approximately a 20° angle to the surface and pressing the knife firmly to the surface so that the blade flexes slightly, scrape the wall in a and forth motion in several directions.	NOTE: The blade should be in constant contact with the wall.
	NOTE: Always keep the blade at a low angle to the surface so that the blade does not "dig in" and gouge the surface.
2. Hold the broadknife as illustrated below for knifing a surface in a more horizontal direction. 	

OPERATION SHEET
SC-3-48

COMPETENCY: "Cut-In" a Ceiling Corner

COURSE: Painting and Decorating UNIT III: Finishing

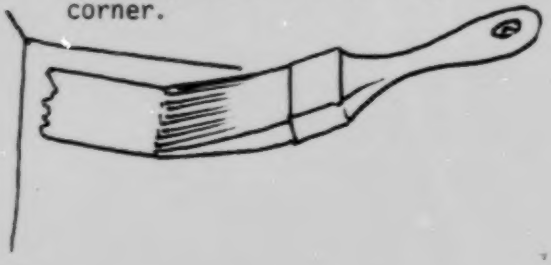
OBJECTIVE: The student will be able to cut-in a straight line at a ceiling corner

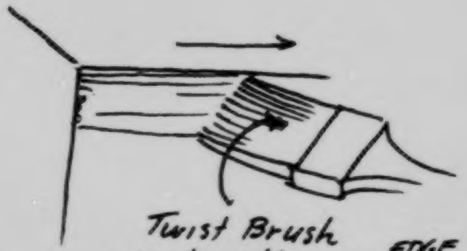
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Load a 2" to 3" flat brush with paint.

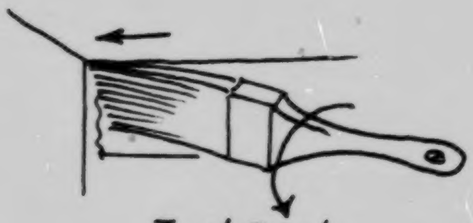
2. Starting in a corner, lay a small amount of paint onto the wall slightly below the ceiling corner.





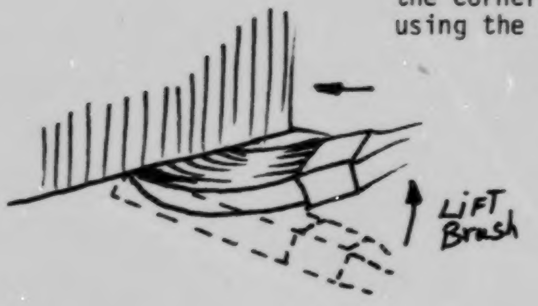
Twist Brush and watch upper EDGE as you cut in corner.

3. Work the tip of one side of the brush into the corner and draw the brush through the corner. Work across the entire wall in this manner.



Twist Brush Push Tip INTO Corner.

NOTE: When starting from a corner, the corner may also be reached by using the tips of the bristle.



OPERATION SHEET
SC-3-49

COMPETENCY: Load a Dip Type Roller

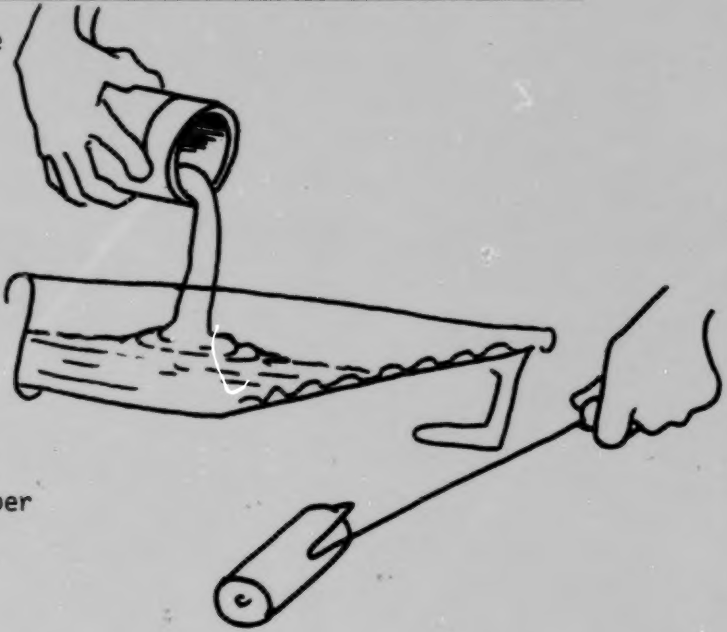
COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to properly load a dip type roller in preparation for paint application

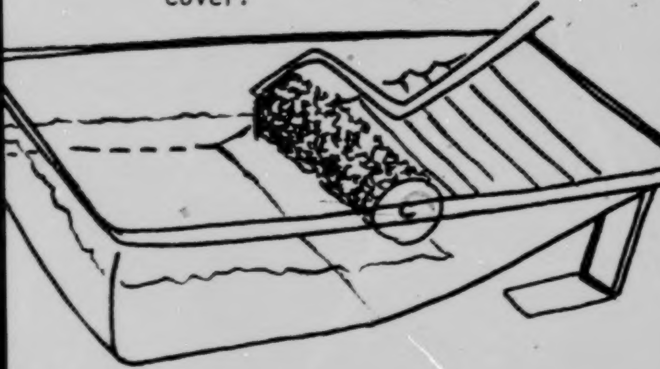
Page 1 of 1 page

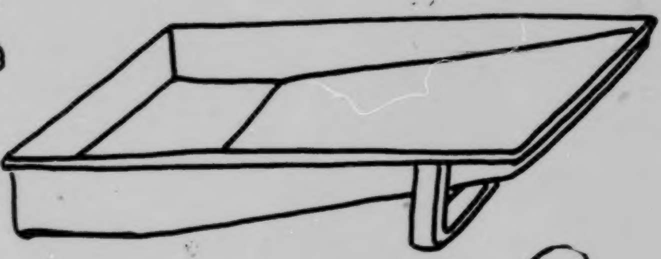
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Pour enough paint to fill half the pan.

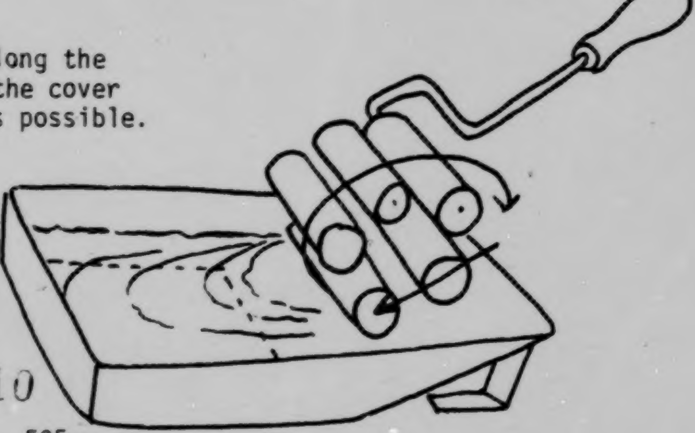


2. Dip roller in paint at a point in the pan where the paint is no deeper than the thickness of the roller cover.





3. Move roller back and forth along the rough part of the pan until the cover has absorbed as much paint as possible.



OPERATION SHEET
SC-3-50

COMPETENCY: Apply Paint with Roller

COURSE: Painting and Decorating — UNIT III: Finishing

OBJECTIVE: The student will be able to properly and efficiently apply paint with a roller

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set down the loaded roller in the center of a square approximately 3' by 3' and work to the sides and ends of that square as in Fig.1, strokes 1, 2, 3, 4, 5 and 6.	
2. Move on to next square adjoining the one just completed and repeat as in Fig. 1.	
3. Work back into a previously painted area by raising the roller gradually as it reaches the painted area.	

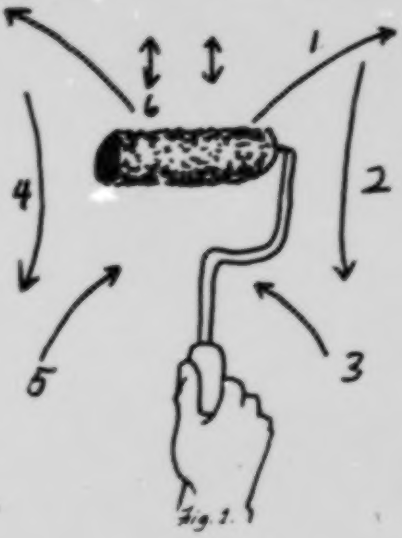


Fig. 1.

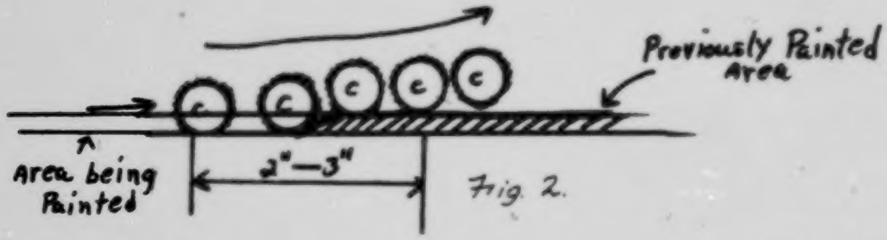


Fig. 2.

NOTE: By the time a 2 to 3 inch overlap has been made the roller should be completely raised from that surface as in Fig. 2.

OPERATION SHEET
SC-3-51

COMPETENCY: Spin a Brush or Roller Cover with a Hand Spinner

COURSE: Painting and Decorating   UNIT III: Finishing

OBJECTIVE: The student will be able to properly and completely remove thinner or solvent from brushes and rollers with a hand spinner

Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Wash brush then insert handle in spinner as illustrated, with handle inside the clamp springs Fig. 1.

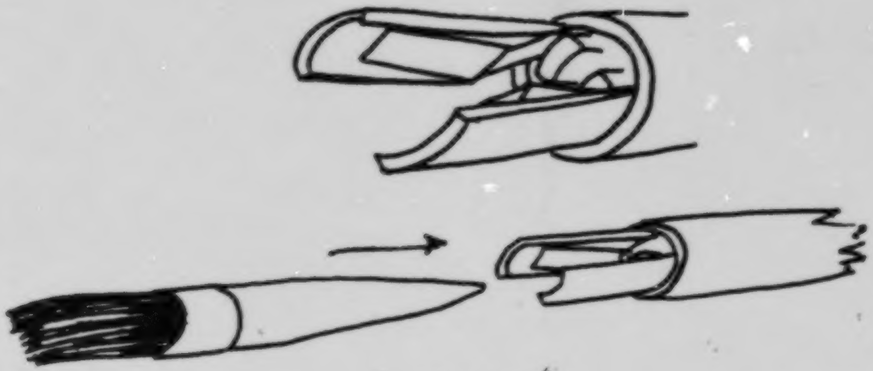
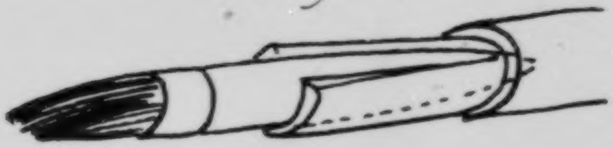


Fig. 1



2. Hold brush in place between the clamp springs of the spinner, and holding spinner body in one hand and handle in other, rapidly work the handle back and forth causing the brush to spin and fan out.

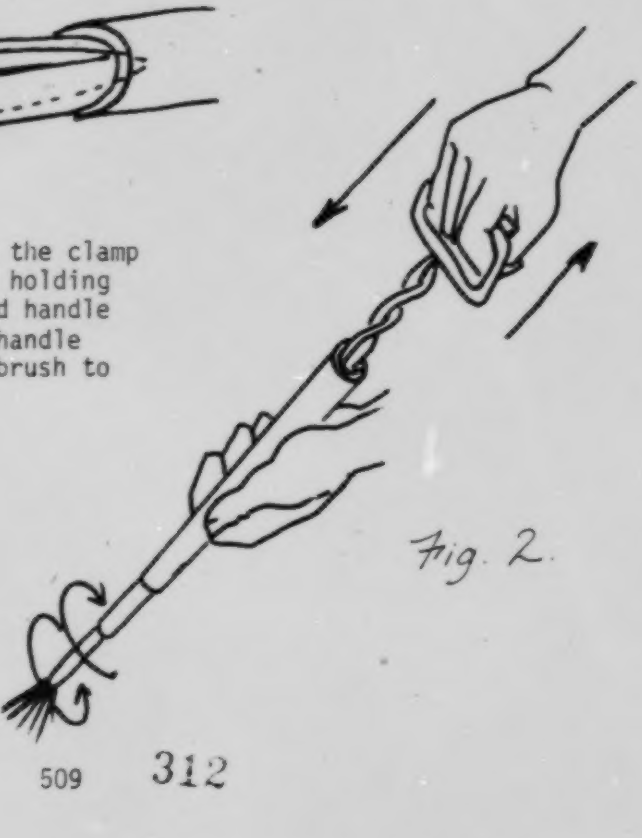
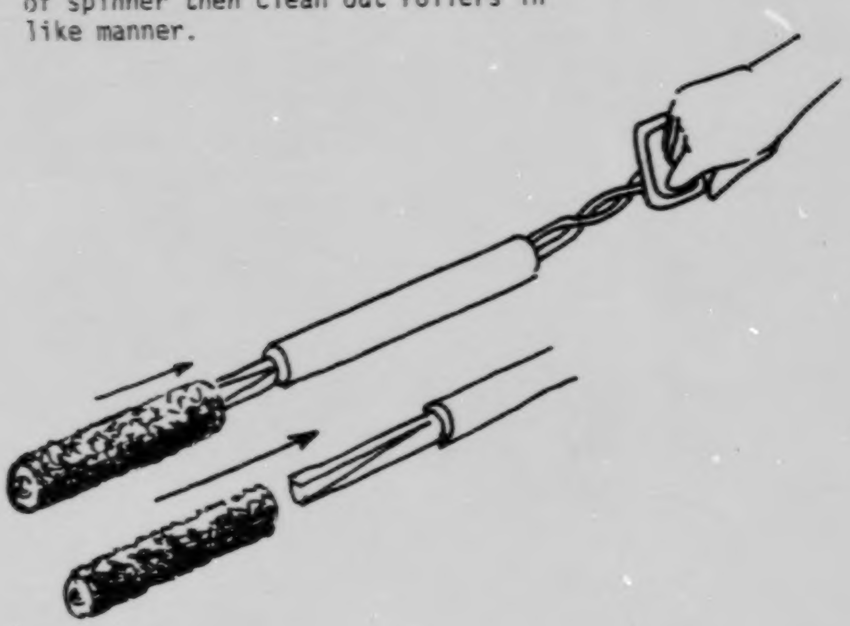


Fig. 2

3. Slide roller cover over clamp springs of spinner then clean out rollers in like manner.



4. Spin as in Fig. 2.

OPERATION SHEET
SC-3-52

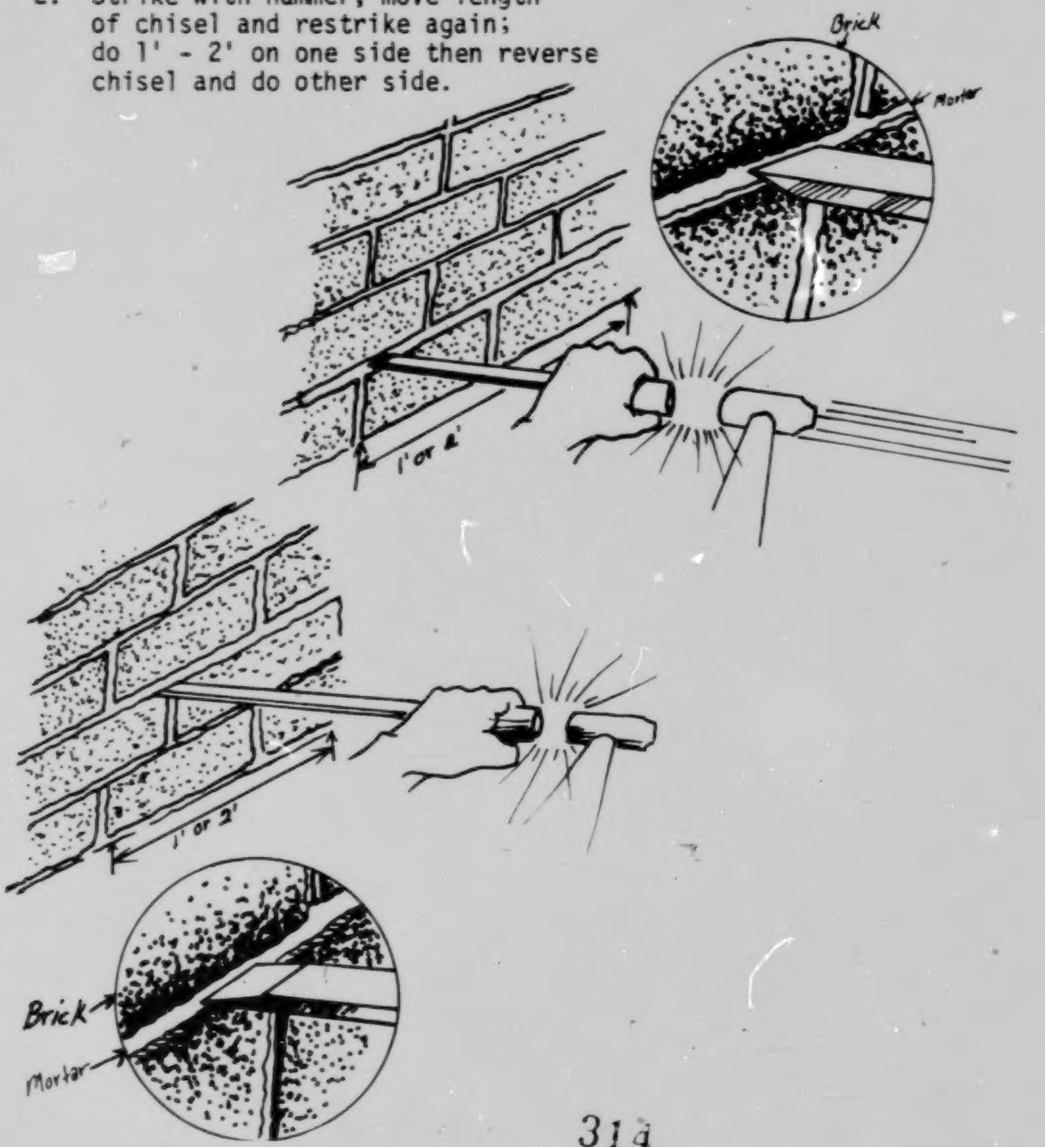
COMPETENCY: Remove loose mortar with a Chisel

COURSE: Painting and Decorating **UNIT III:** Finishing

OBJECTIVE: The student will be able to properly remove loose mortar from side of brick with hammer and chisel

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Set straight edge of chisel toward side of brick.	NOTE: Eye protection should be worn at all times.
2. Strike with hammer, move length of chisel and restrike again; do 1' - 2' on one side then reverse chisel and do other side.	



OPERATION SHEET
SC-3-53

COMPETENCY: Use a Joint or Tuck Trowel

COURSE: Painting and Decorating

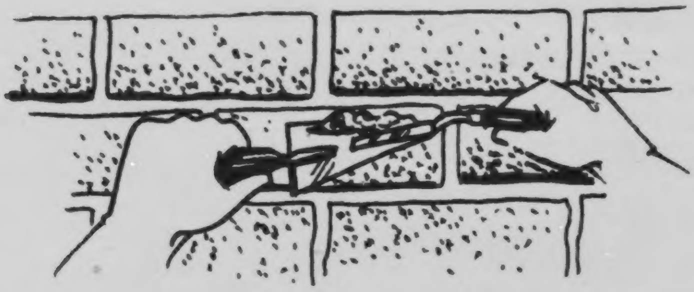
UNIT III: Finishing

OBJECTIVE: The student will be able to patch or fill a brick or block masonry joint using a tuck trowel

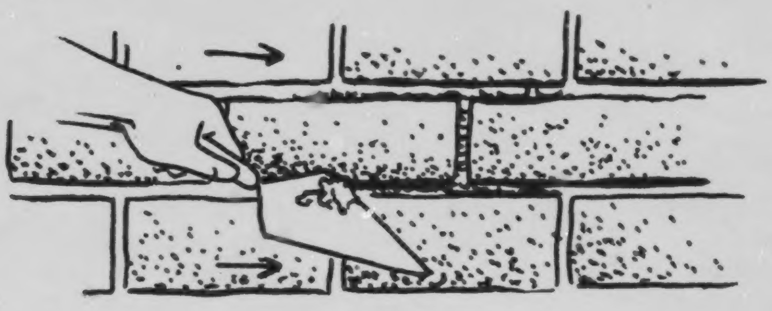
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place or "pick up" a small amount of patching material on the back of a triangular trowel and placing the trowel directly below the joint to be patched force the patching material into the joint with the blade of the joint or tuck trowel.



2. Use the triangular trowel to cut off or scrape any excess patching material from the face of the brick or block surface.



OPERATION SHEET
SC-4-1

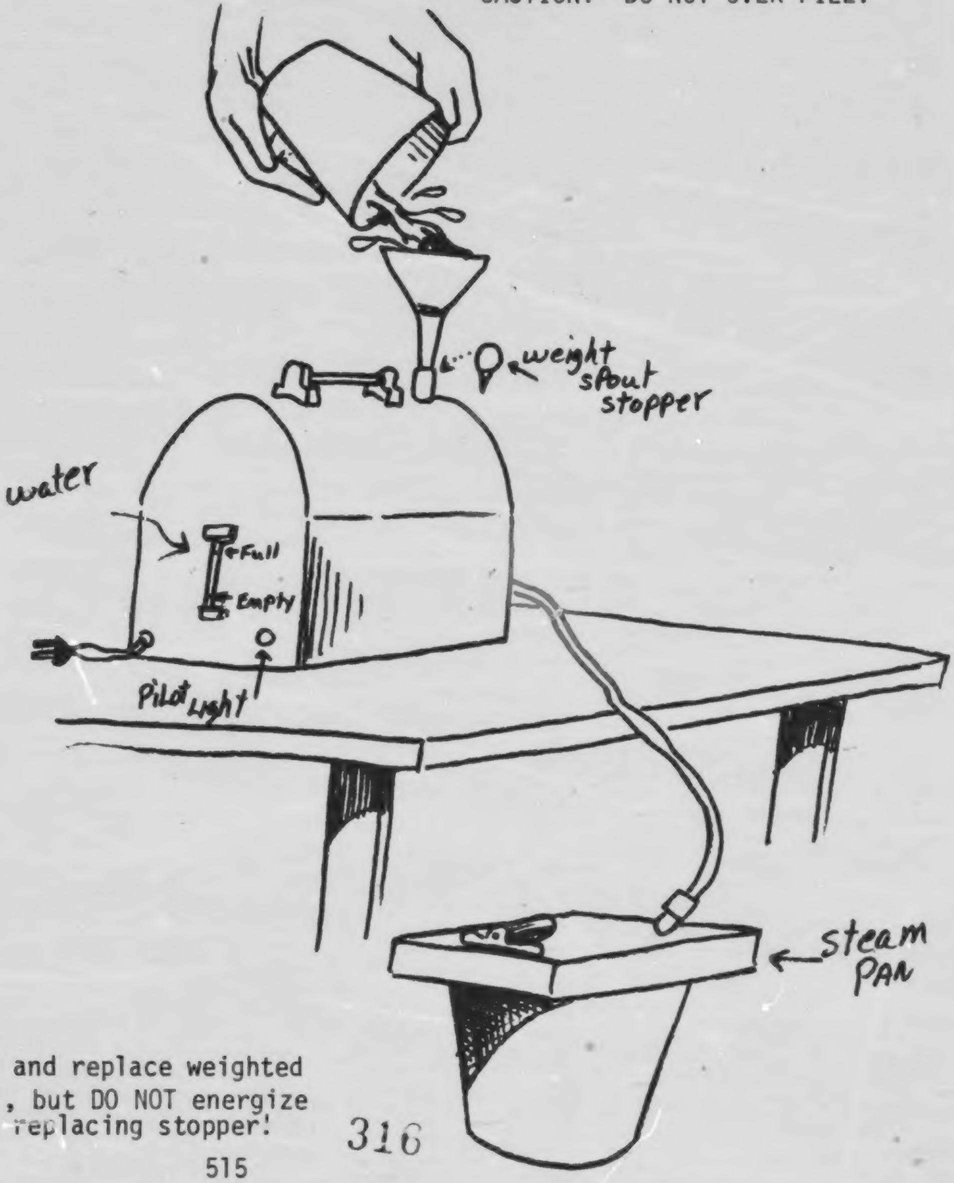
COMPETENCY: Charge and Use a Wallpaper Steamer

COURSE: Painting and Decorating UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to fill and energize a wallpaper steamer so that it produces steam safely

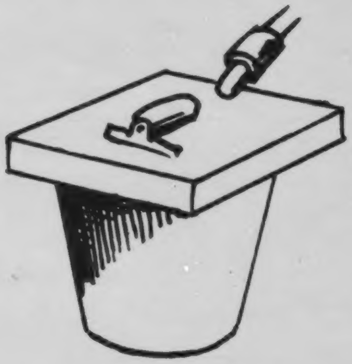
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Pour water into tank until water level reaches the Full line on the glass water gage.	NOTE: Clean water should be poured into the tank through the fill spout using a clean funnel. CAUTION: DO NOT OVER FILL!

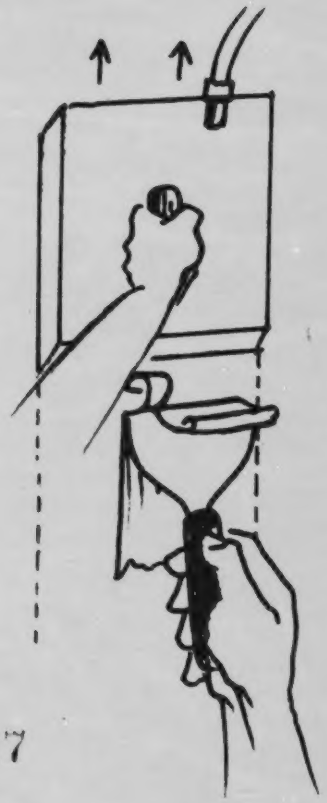


2. Remove funnel and replace weighted spout stopper, but DO NOT energize system before replacing stopper!	

COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
3. Plug power cord into electrical outlet.	NOTE: Pilot light will illuminate when power is present.
4. Set stem pan on a bucket to catch water that will be pushed out ahead of steam.	



5. Generate steam and place the pan at the lowest point on the extreme right or left of the wall, then holding pan in place until wall covering becomes loose, scrape paper from softened area while advancing pan to adjoining area.



OPERATION SHEET
SC-4-2

COMPETENCY: Set Up Paste Table (Box Type)

COURSE: Painting and Decorating

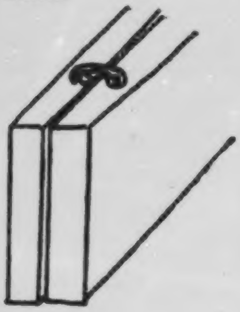
UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to assemble box type table

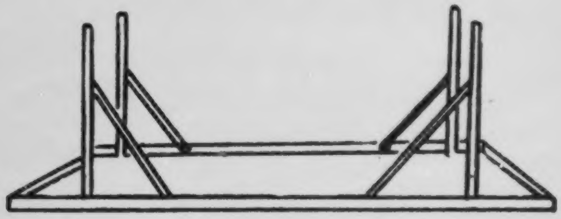
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Lay folded paste table on floor with the hinged side down.



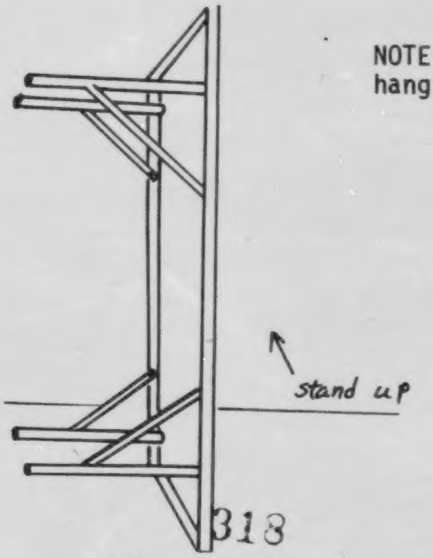
2. Loosen clips and lay board flat on floor; stand up and brace legs.



3. Remove extension board and straight edge from inside.

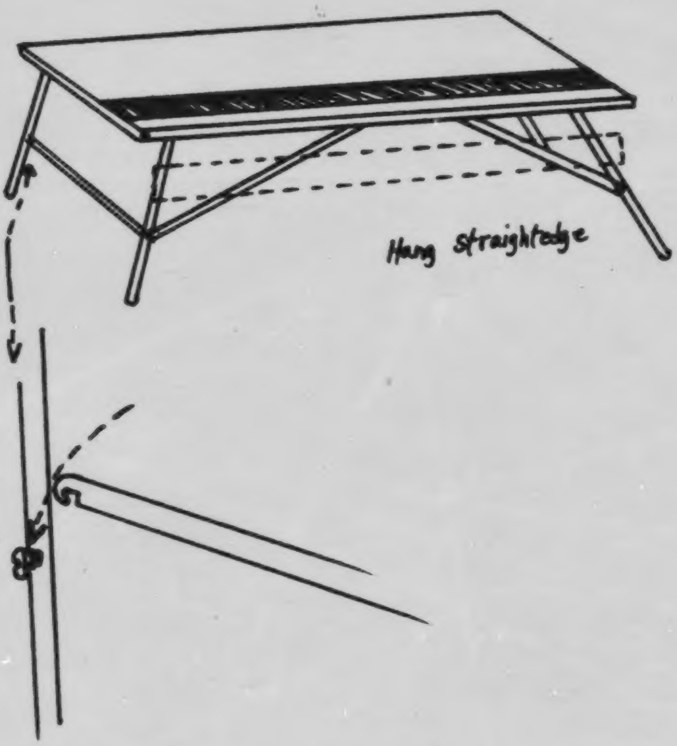
4. Stand board on end.

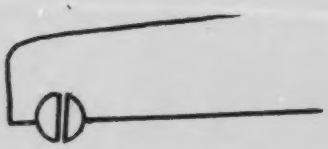
NOTE: Be careful not to hit low hanging lights or ceiling.



5. Continue on through and stand board all four legs.

6. Hang straightedge on front legs.


Hang straightedge



OPERATION SHEET
SC-4-3

COMPETENCY: Cut to a Line with a 10" Paper Shears

COURSE: Painting and Decorating UNIT IV: Wallcoverings

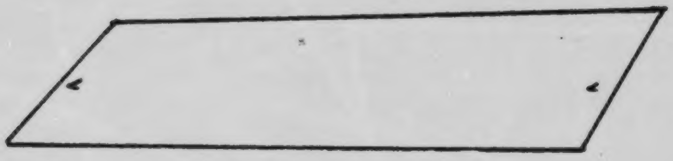
OBJECTIVE: The student will be able to develop accuracy in the use of paper hanger's shears

Page 1 of 1 page

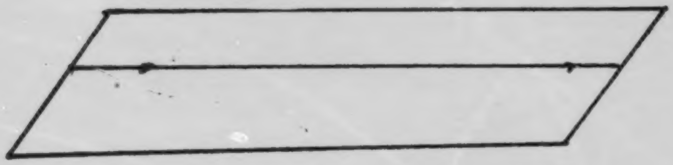
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Paste and fold paper keeping edges aligned and paper free of wrinkles and blisters.

2. From the appropriate edge close to ends, measure in required distance and place marks.

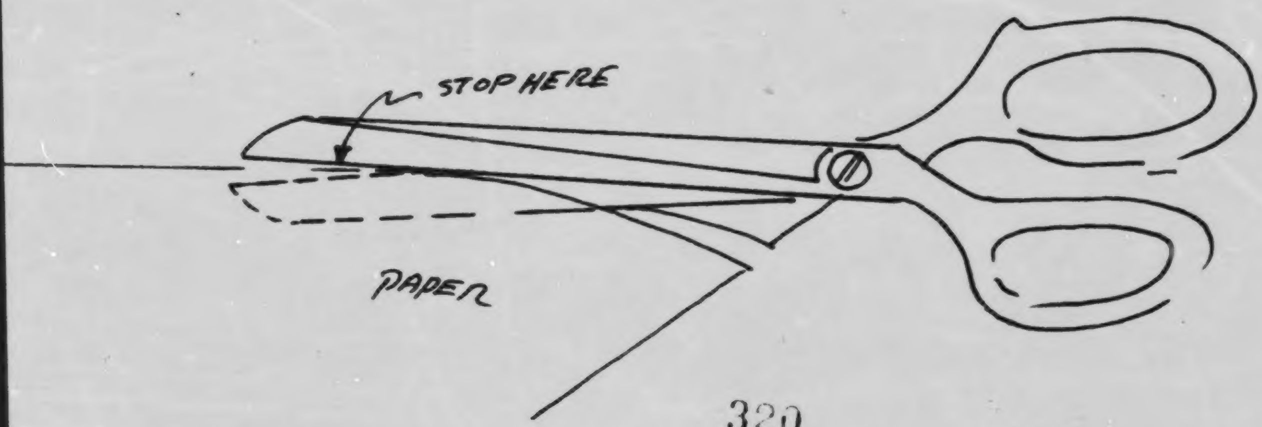


3. Place a straightedge on these marks and, with a pencil draw a line the length of the paper.



4. Cut along line with paper shears.

NOTE: When cutting with shears don't completely close shears. Use only 3/4 of total length of blade.



OPERATION SHEET
SC-4-4

COMPETENCY: Mix Paste with a Paste Whip

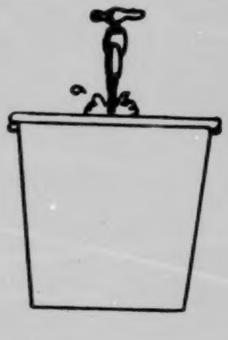
COURSE: Painting and Decorating UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to efficiently mix paste to proper consistency using a paste whip

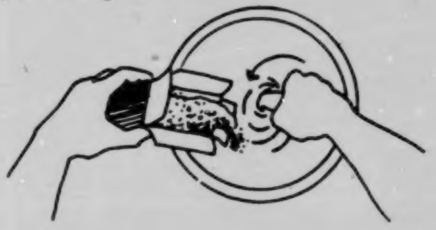
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place desired amount of water in pail.



2. Pour the paste with one hand while stirring the mixture with paste whip, using a circular lifting motion.

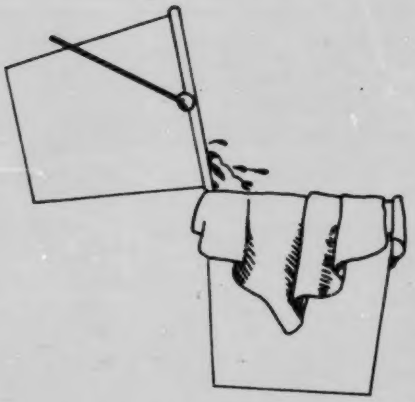


3. Add paste until desired consistency is obtained.

NOTE: Paste will thicken after mixing. Therefore, it should be mixed before cutting. and then thinned to working consistency before application.

4. Strain the paste through cheese cloth to remove any lumps.

NOTE: If paste is to be left stand overnight it should be covered with approximately ½" of water.



OPERATION SHEET
SC-4-5

COMPETENCY: Use Folding Paste Pail Stand

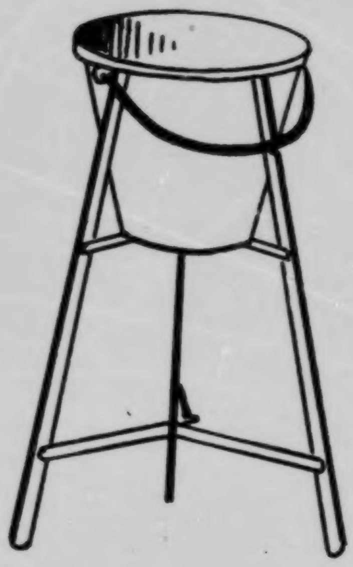
COURSE: Painting and Decorating

UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to safely hold pail in an elevated position

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Stand paint stand on end and expand.	
2. Place paste stand in position to the right end of table.	
3. Place paste pail in stand.	



322

OPERATION SHEET
SC-4-6

COMPETENCY: Apply Paste with a Brush

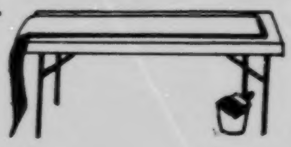
COURSE: Painting and Decorating UNIT IV: Wallcoverings

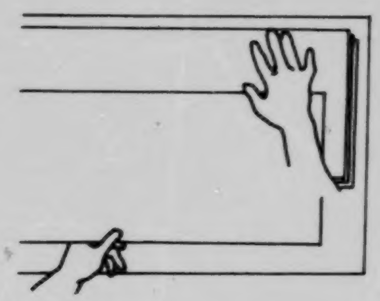
OBJECTIVE: The student will be able to neatly and properly apply paste to wallpaper using a brush

Page 1 of 1 page

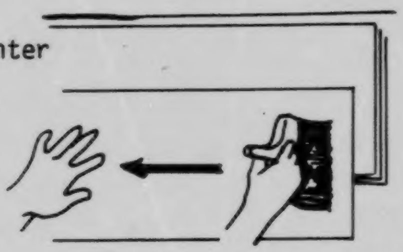
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

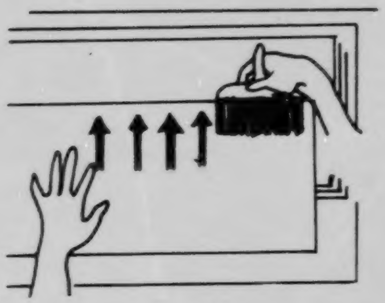
1. Place the paste pail to the front right side of paste table.



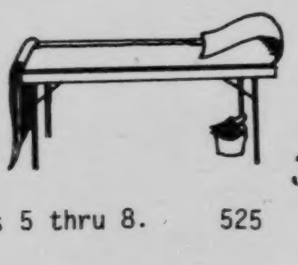


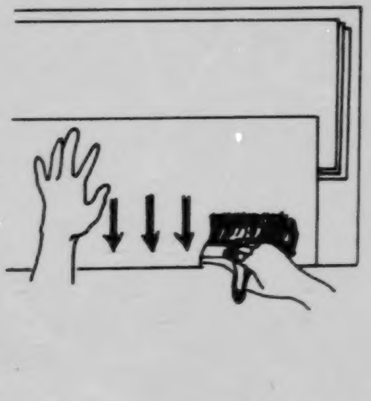
2. Place all sheets of paper to be pasted on paste table.
3. Push all sheets to back edge of board or at least six inches from front edge.
4. Move the top sheet to within two inches of the front of paste table.
5. Apply the first full brush down center of sheet from right to left.





6. Spread paste from center to back edge of paper.
7. Move strip of paper from the position towards the front edge of table and place front edge of paper even with front edge of paste table.
8. Spread paste from center toward front.
9. Fold the top end of the paper to the center of the paper and with edges even, move board keeping two inches from front edge.





10. Repeat steps 5 thru 8.

OPERATION SHEET
SC-4-7

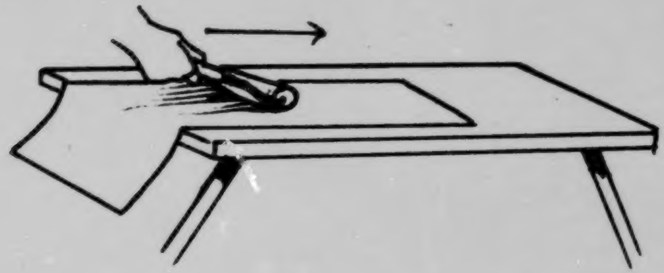
COMPETENCY: Apply Paste with a Roller

COURSE: Painting and Decorating — UNIT IV: Wallcoverings

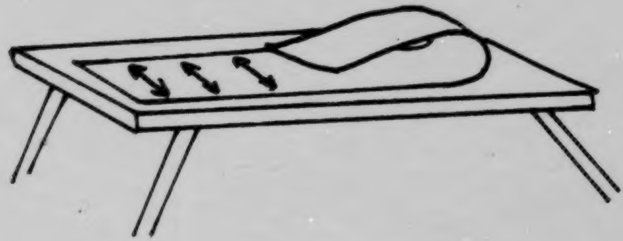
OBJECTIVE: The student will be able to completely and safely cover paper with paste using a roller

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Load roller with paste by dipping in prepared paste.	
2. Apply the first stroke down center of strip about three feet.	



3. Work the paste from center to edge with all strokes.	



4. Repeat procedure until entire sheet is pasted.	NOTE: Rolling of paste is usually done only with premixed vinyl paste on heavy duty vinyl.

OPERATION SHEET
SC-4-8

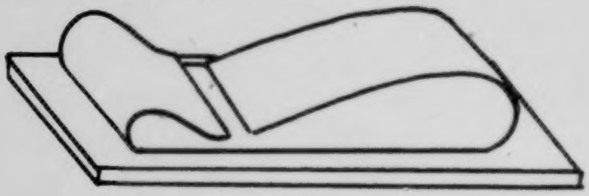
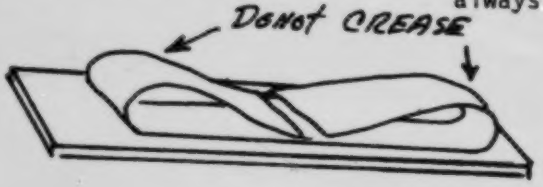
COMPETENCY: Fold Pasted Paper

COURSE: Painting and Decorating

UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to fold paper so it can be easily handled

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Paste paper from marked head which should be to the right.	NOTE: Each sheet should be numbered.
2. Paste all paper on table, then fold paper head toward foot approximately 2/3 length. 	NOTE: Keep edges aligned. This keeps paste on edges from drying.
3. Pull remaining paper up onto the board and paste remaining paper.	
4. Fold bottom toward the top keeping edges aligned.  	NOTE: The long fold should always be at the top.

OPERATION SHEET
SC-4-9

COMPETENCY: Use a Plumb Bob

COURSE: Painting and Decorating

UNIT IV: Wallcoverings

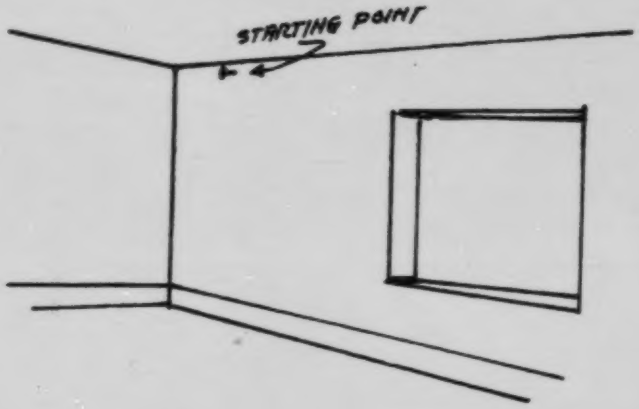
OBJECTIVE: The student will be able to establish a plumb vertical line

Page 1 of 1 page

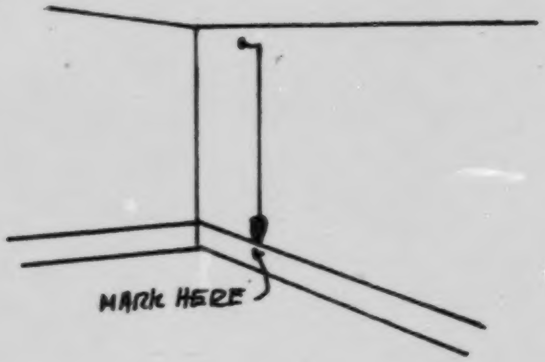
COMPETENCE - PROCEDURES/STEPS
The student will be able to:

TEACHING/LEARNING ACTIVITIES

1. Determine starting point for first sheet of material.
2. Set a tack or nail at this point within three inches of ceiling.



3. Attach line from plumb bob so plumb bob swings above baseboard.
4. Allow plumb bob to stop swinging then place a mark directly behind point or line.



5. Proceed to snap a chalk line between the two points established using the plumb bob.

OPERATION SHEET
SC-4-10

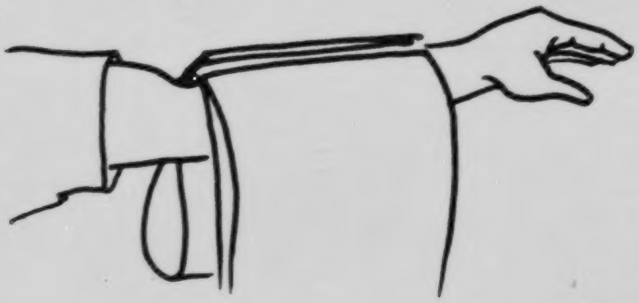
COMPETENCY: Unfold and Position Paper to a Vertical Line

COURSE: Painting and Decorating **UNIT IV:** Wallcovering

OBJECTIVE: The student will be able to unfold wallpaper and position vertically to an established line

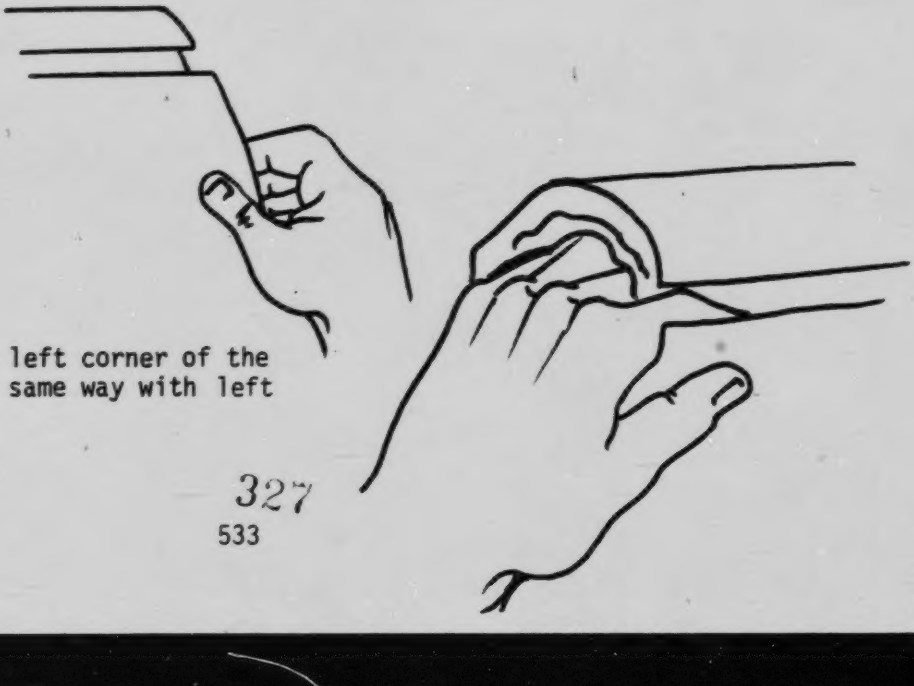
Page 1 of 3 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Lift the strip of wallpaper from the paste table and carry it over left arm, like a coat, to the ladder.	NOTE: Place the strip over arm so that the point where the two folds meet is on top and the long fold faces inward.



2. Climb the ladder to the required height.

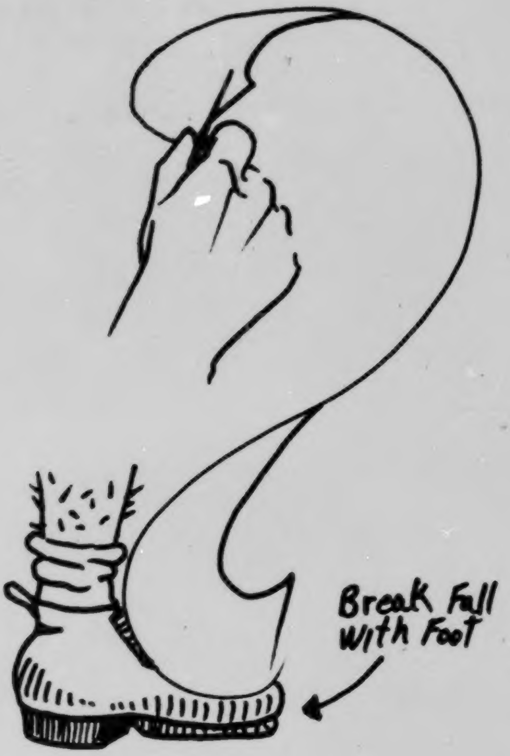
3. Hold the top right corner of the long fold between the first finger and thumb of right hand. Place the three other fingers under the fold.



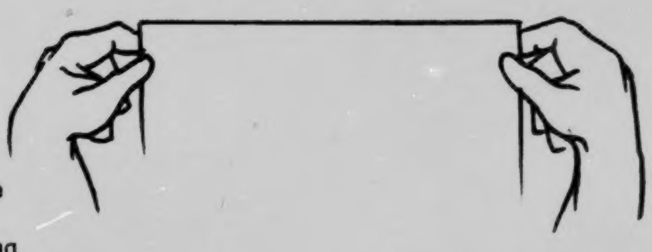
4. Hold the top left corner of the strip in the same way with left hand.

5. Hold the paper against oneself and allow the paper to unfold supporting the end of the strip with foot to break the fall.

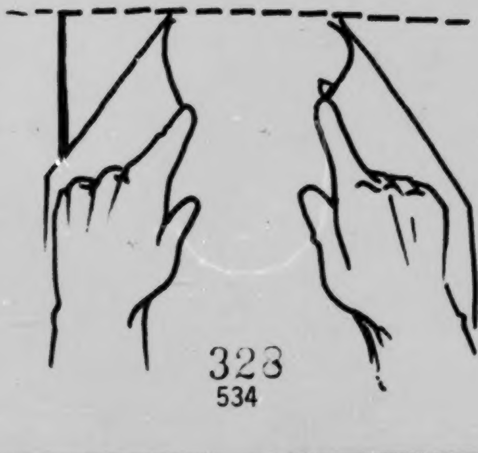
NOTE: Do not allow the paper to unfold too rapidly or the strip will tear.



6. Place the backs of three fingers of each hand against the pattern side of the paper.



7. Position the strip on the wall so that the predetermined pattern-ceiling line fits into the ceiling corner.

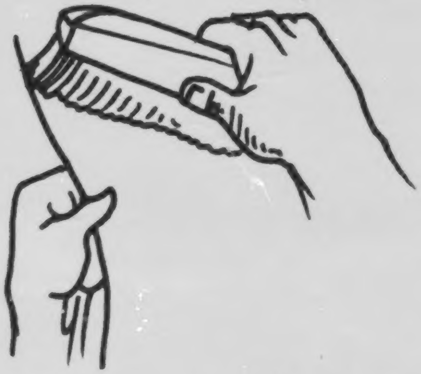


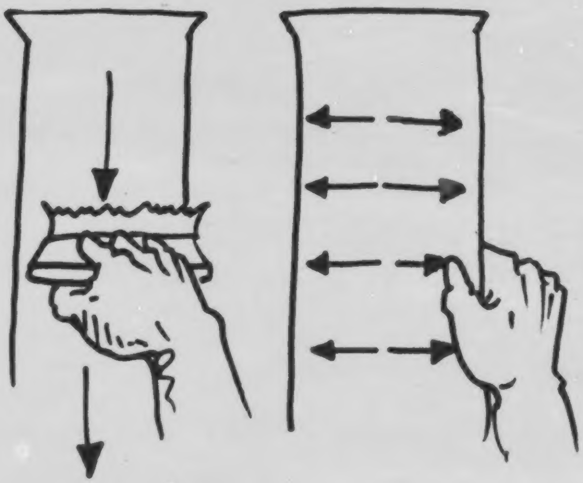
NOTE: The top of the strip should extend at least 1" around the ceiling corner.

COMPETENCE - PROCEDURES/STEPS | TEACHING/LEARNING ACTIVITIES

8. At the same time, align the long edge of the strip with the marked vertical starting line.

BE SURE THE EDGE OF THE STRIP IS ON OR PARALLEL TO THE VERTICAL STARTING LINE.





9. Using the smoothing brush, smooth out all air bubbles, blisters and wrinkles by brushing the center of the strip and then brush from the center to both outer edges of the strip.

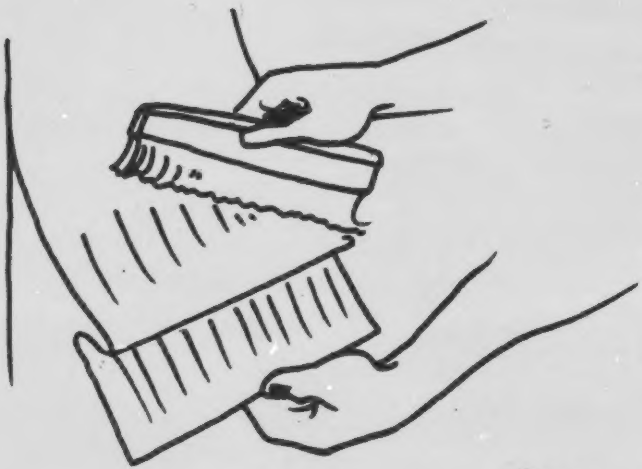
10. When the strip has been smoothed down to the top of the bottom fold, unfold the bottom fold and smooth out the bottom of the strip into the corner at the top of the base molding.

NOTE: Do not apply too much pressure in smoothing the paper. The paper may stretch, and if it does, it will not match the next strip properly.

NOTE: Wet paper has a tendency to tear when too much pressure is applied to it.

NOTE: Sometimes, you will have to pull the paper away from the wall and smooth it down again to eliminate wrinkles.

NOTE: If the strip is not properly positioned, pull the strip away from the wall and reposition the strip.



OPERATION SHEET
SC-4-11

COMPETENCY: Smooth Wall Coverings with a Brush

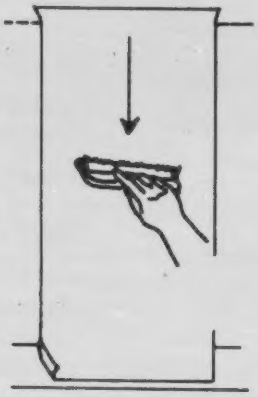
COURSE: Painting and Decorating **UNIT IV:** Wallcoverings

OBJECTIVE: The student will be able to efficiently smooth paper eliminating any air pockets

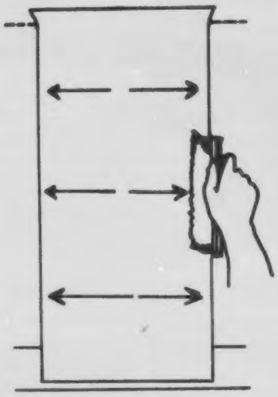
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

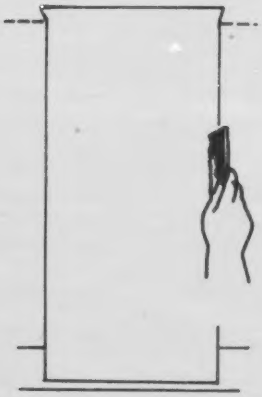
1. After covering is positioned on wall, run brush down the length of the middle of sheet.



2. Smooth from center to edge removing all air bubbles, blisters and wrinkles.



3. Set the edges by tapping the edge of the paper with smoothing brush to ensure tight adhesion.



OPERATION SHEET
SC-4-12

COMPETENCY: Roll Seams

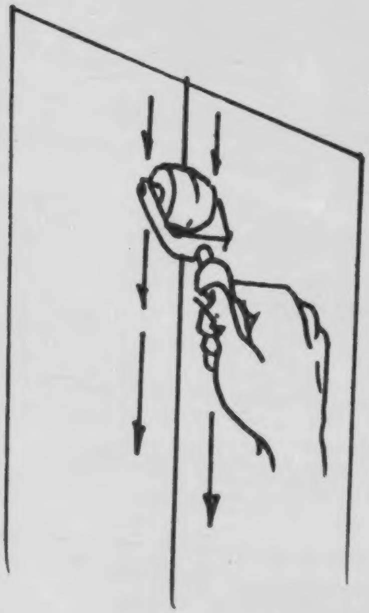
COURSE: Painting and Decorating

UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to roll seams so paper stock is secured to wall

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Holding the handle of an oval seam roller securely like a hammer handle, roll from one end of seam to the other with the crown of the roller centered on the seam so both pieces of paper are rolled with equal pressure.	CAUTION: Do not roll seam until paste has begun to set up. This will help avoid squeezing paste out onto the surface of the paper.



OPERATION SHEET
SC-4-13

COMPETENCY: Replace Razor Blades in Razor-Knife

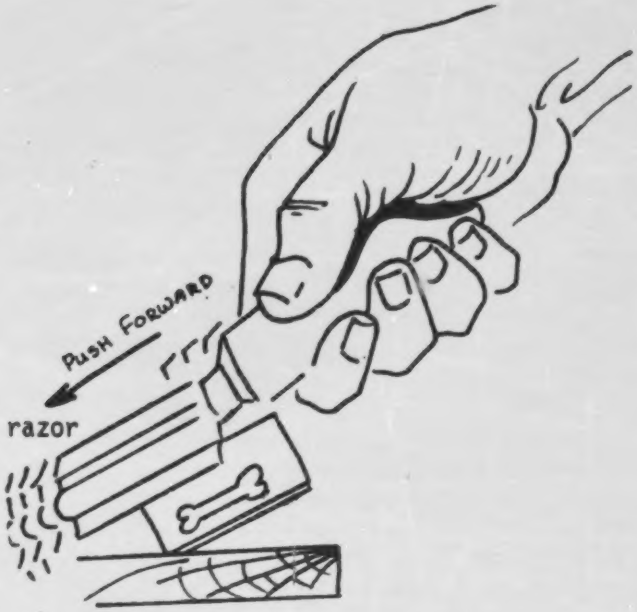
COURSE: Painting and Decorating

UNIT IV: Wallcoverings

OBJECTIVE: The student will be able to replace razor blades safely and securely in a razor-knife

Page 1 of 2 pages

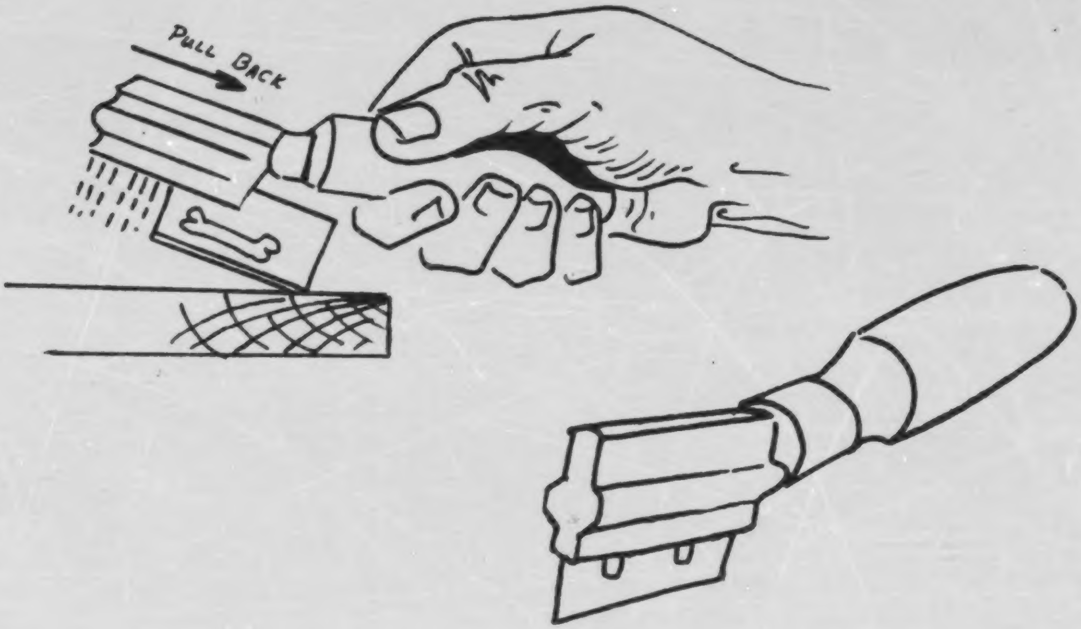
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Remove blade by pushing on front edge of blade with a firm even stroke.	



2. Stop short of completely removing razor blade.

3. Remove blade completely with fingers and discard in a safe place.

COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
4. Start new blade but do not remove covering.	
5. Pull with firm pressure until blade is completely seated.	



OPERATION SHEET
SC-4-14

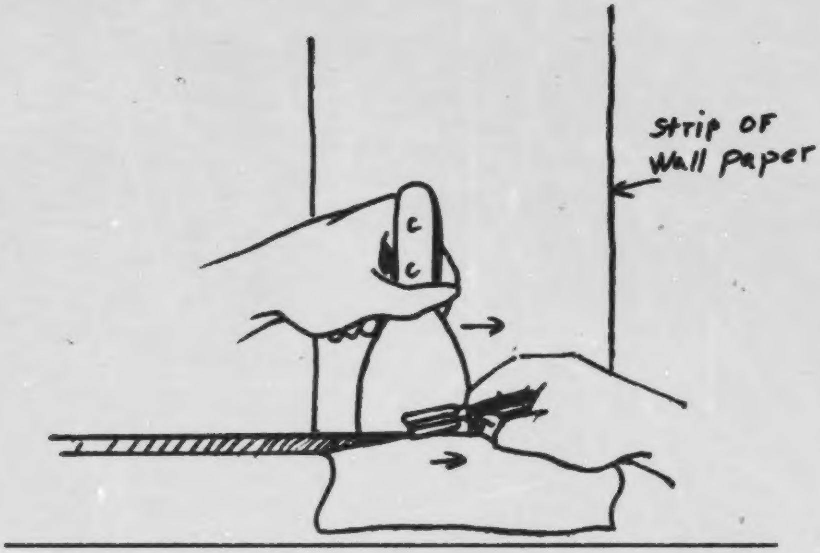
COMPETENCY: Trim Wallpaper Using a Broadknife as a Straightedge

COURSE: Painting and Decorating **UNIT IV:** Wallcoverings

OBJECTIVE: The student will be able to use a broadknife as a guide or straightedge to trim wallpaper

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Fit a broadknife blade tightly into the corner formed by the casing or molding and draw a razor knife along the front edge of the broadknife, moving the broadknife across the strip until the full length or width of wallpaper is cut.	NOTE: DO NOT remove blade from cut while moving broadknife.



OPERATION SHEET
SC-4-15

COMPETENCY: Cut to Ceiling or Base with Paper Shears

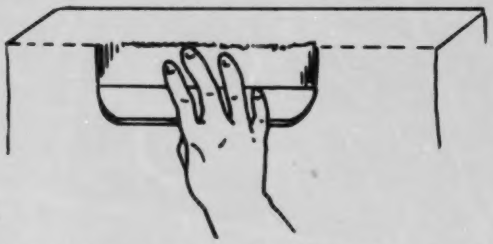
COURSE: Painting and Decorating **UNIT IV:** Wallcoverings

OBJECTIVE: The student will be able to accurately cut ceiling or base joints with a paper shears

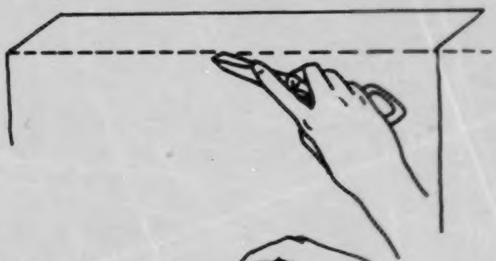
Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

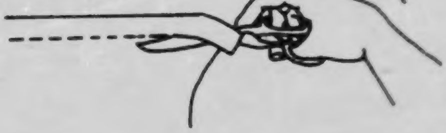
1. Hang sheet to line and smooth paper into corner made by wall and ceiling.



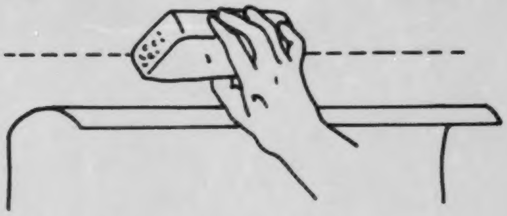
2. Holding the shears closed, run one edge of the shears along the paper in the corner making a mark.



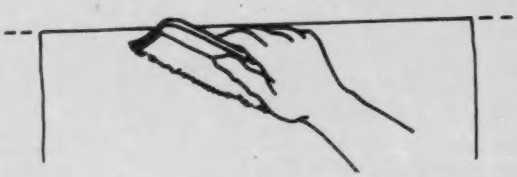
3. Pull paper loose from the wall and cut along mark made by shears.



4. Remove paste from ceiling or base with sponge.



5. Smooth paper to wall using smoothing brush.



OPERATION SHEET
SC-4-16

COMPETENCY: Relieve Material over Corner Molding with Shears

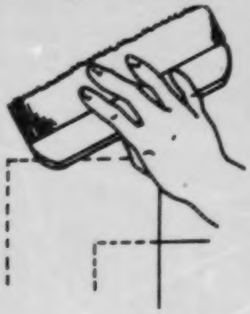
COURSE: Painting and Decorating **UNIT IV:** Wallcoverings

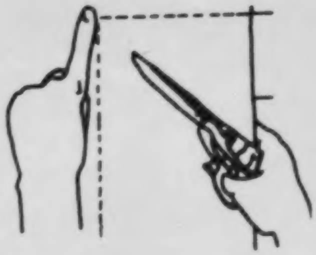
OBJECTIVE: The student will be able to accurately cut paper for corner molding

Page 1 of 2 pages

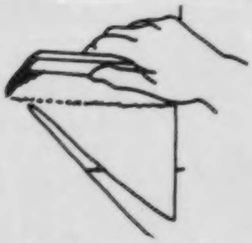
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

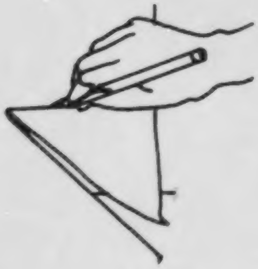
1. Smooth wall coverings into place making seam and setting where possible.



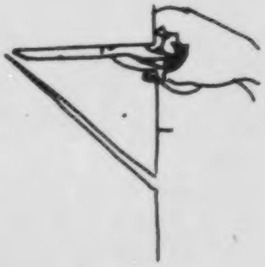


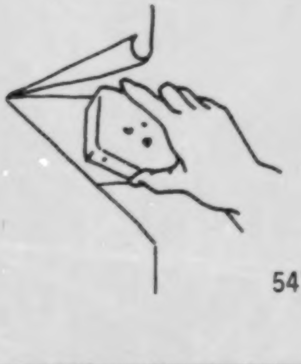
2. Hold one finger on the top corner of the door casing, to indicate stopping point.
3. Using shears, cut approximately on a 45° angle to finger.
4. Set paper back over casing to wall, tap into corner made between top of casing and wall, forming a tight angle.

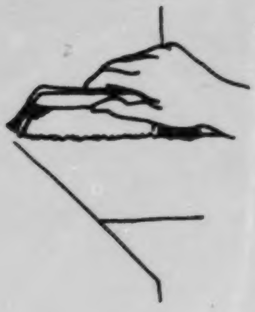




5. Mark lightly along angle with pencil.
6. Pull paper loose and cut along line.
7. Sponge off any paste on the casing.





COMPETENCE - PROCEDURES/STEPS	TEACHING/LEARNING ACTIVITIES
8. Smooth the paper to wall and tap into corner. 9. Use same process on side.	

OPERATION SHEET
SC-4-17

COMPETENCY: Cut Wall Covering with Straightedge

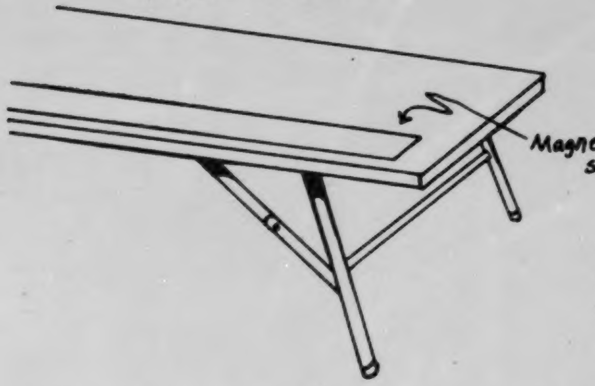
COURSE: Painting and Decorating UNIT IV: Wallcoverings

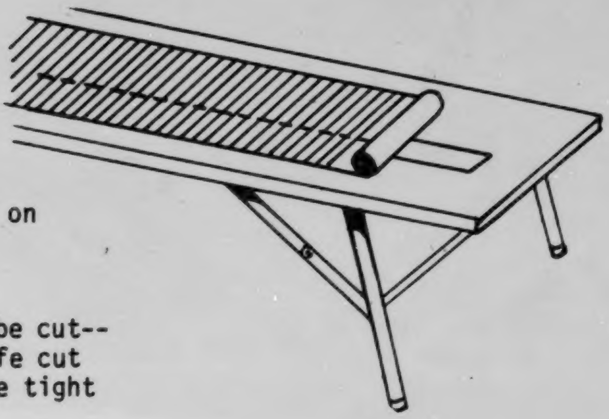
OBJECTIVE: The student will be able to accurately trim salvages and/or split strips of wall covering

Page 1 of 1 page

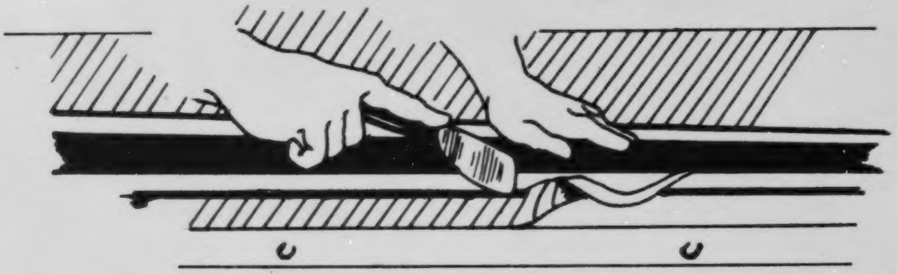
COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Place magnesium strip on table as in Figure 1 if table is not equipped with one.





2. Lay strip of paper to be trimmed on table so trim line is over the magnesium strip. Figure 2.
3. Lay straightedge on the line to be cut--with razor blade or trimming knife cut along straightedge, keeping blade tight against the edge. Figure 3.



OPERATION SHEET
SC-5-1

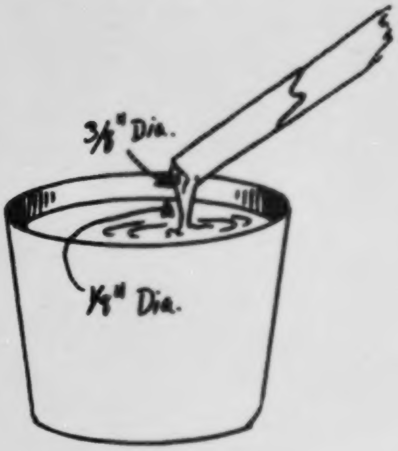
COMPETENCY: Thin Paint for Spraying

COURSE: Painting and Decorating   **UNIT V:** Spray Painting

OBJECTIVE: The student will be able to thin paint for spraying

Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Mix paint completely	
2. Check material consistency or viscosity:	
a. Lift material from can with paint paddle holding it 6" to 10" at a 60° angle over paint bucket so paint runs into bucket.	NOTE: If material is thinned properly it should form a solid stream approximately 3/8" diameter at the paint where it runs off the paddle to 1/8" diameter at the point of entry.
	NOTE: Because so many things can cause variations in viscosity no procedure can be set. Once these conditions have been met test material in spray gun.



OPERATION SHEET
SC-5-2

COMPETENCY: Disassemble and Assemble a Conventional Air Spray Gun

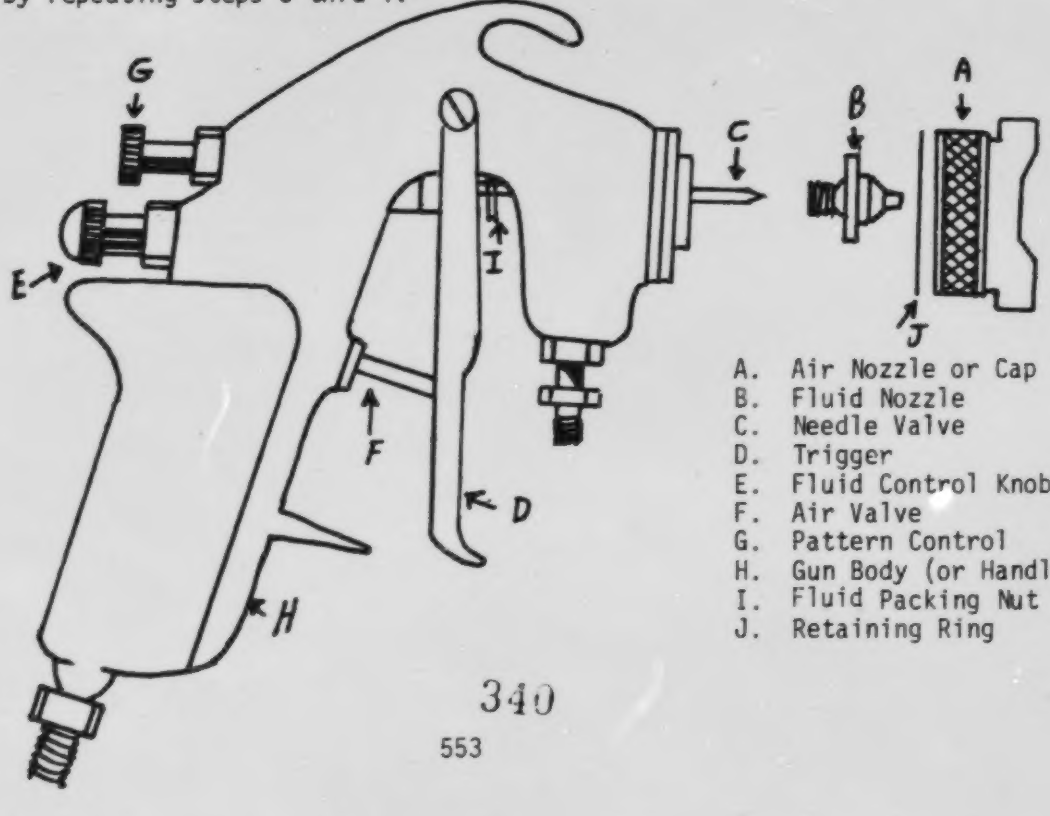
COURSE: Painting and Decorating **UNIT V:** Spray Painting

OBJECTIVE: The student will be able to disassemble and assemble the needle, fluid nozzle and air cap of a spray gun in proper sequence

Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Remove the air cap (A) and retaining ring (J) if applicable.
2. Remove the fluid control knob. (E)
3. Slightly loosen the fluid packing nut. (I)
4. Remove the needle (C) by first depressing the trigger (D) to expose the back of the needle then pull the needle completely from the gun body.
5. Using the gun wrench, loosen and remove the fluid nozzle. (B)
6. To assemble the gun, replace these parts by repeating steps 5 thru 1.



A. Air Nozzle or Cap
B. Fluid Nozzle
C. Needle Valve
D. Trigger
E. Fluid Control Knob
F. Air Valve
G. Pattern Control
H. Gun Body (or Handle)
I. Fluid Packing Nut
J. Retaining Ring

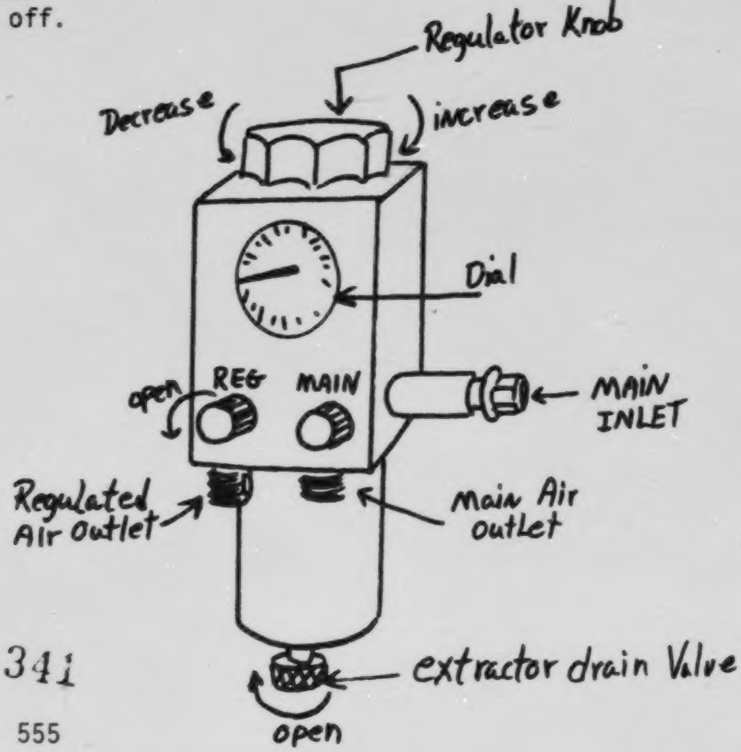
COMPETENCY: Use and Adjust Air Regulator

COURSE: Painting and Decorating **UNIT V:** Spray Painting

OBJECTIVE: The student will be able to connect and adjust pressure on the air regulator

Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Adjust pressure by turning the adjustment knob at top of regulator--clockwise to decrease--counter clockwise to increase.	NOTE: Dial reading is obtained from front of regulator.
2. Connect gun air hose to either regulated or main air outlets.	CAUTION: Main air is not regulated and will operate equipment at line pressure which may exceed maximum safe operating pressure for gun and/or cup. Open outlet valve for appropriate (regulated or main) air by turning counterclockwise.
NOTE: Extractor can be drained by turning the drain valve counterclockwise with system turned off.	
3. Close valve before turning system on.	


Regulator Knob
Decrease
increase
Dial
open
REG
MAIN
MAIN INLET
Regulated Air Outlet
Main Air outlet
extractor drain Valve
open

OPERATION SHEET
SC-5-4

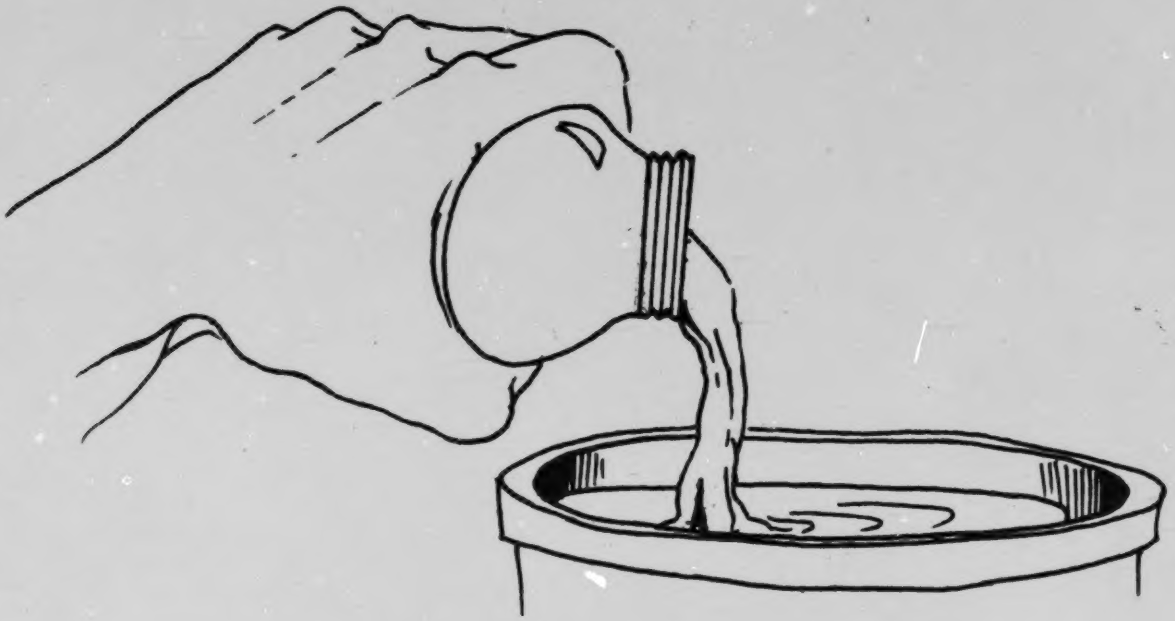
COMPETENCY: Clean a Spray Gun

COURSE: Painting and Decorating **UNIT V:** Spray Painting

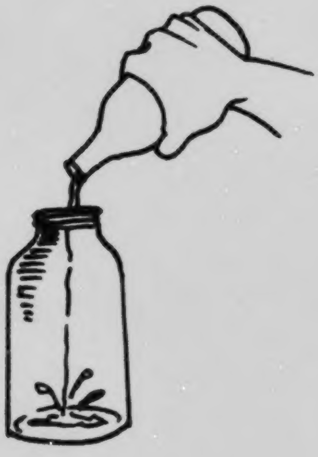
OBJECTIVE: The student will be able to properly clean a spray gun of all traces of paint

Page 1 of 3 pages

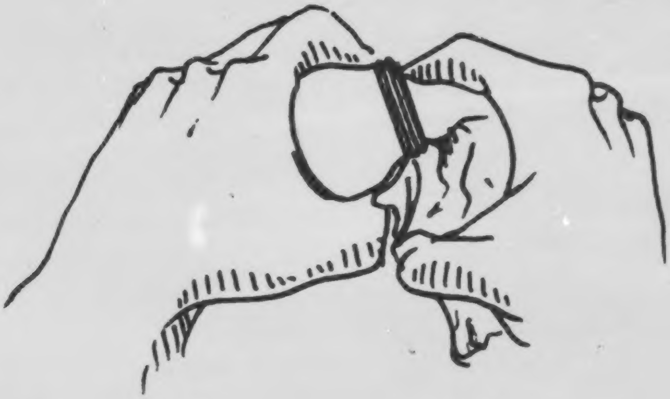
COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Select the proper solvent to clean the spray gun.	
2. Pour out any paint that is left in the cup.	



3. Rinse the cup with the proper solvent.

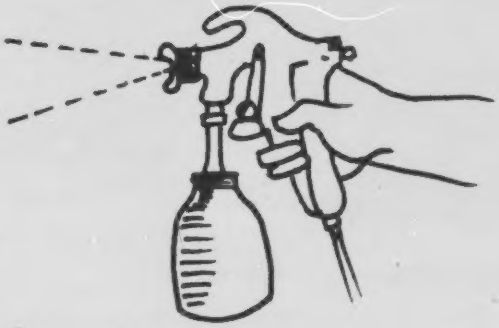


4. Pour out the solvent into the scrap solvent can and wipe out any excess solvent with a wiping rag.



5. Fill the cup one-third full with the proper solvent.

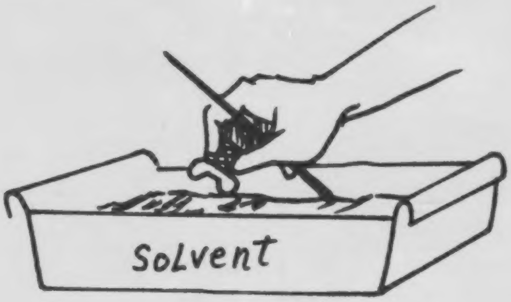
6. Flush the gun by spraying out the solvent.



7. Remove the air and fluid nozzles and the fluid needle.

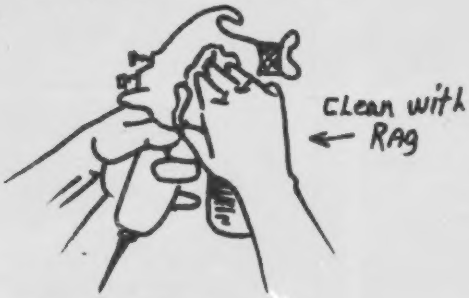
COMPETENCE - PROCEDURE/STEPS	TEACHING/LEARNING ACTIVITIES

8. Rinse the nozzles and fluid needle in the solvent and wipe them dry.

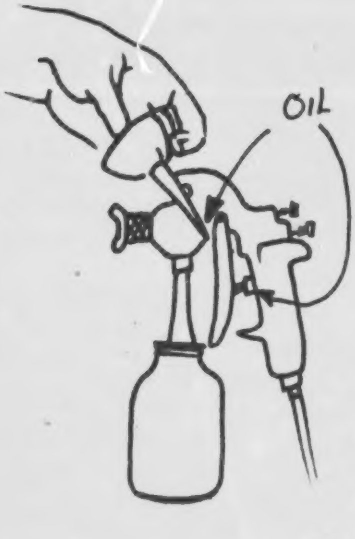


9. Replace all parts.

10. Wipe the paint off the exterior of the gun and cup with wiping rag moistened with solvent.



11. Oil around the fluid needle packing nut and the air valve packing nut.



POINTS TO REMEMBER about cleaning a spray gun.

1. Never put the entire gun into the solvent. Solvent will dry out the packing around the fluid needle and air valve. If this packing dries, the gun will leak air.

2. Never use a piece of wire to clean out holes in the air cap, or in any other part of the gun. Use a toothpick or broom bristle to clean holes.

OPERATION SHEET
SC-5-5

COMPETENCY: Spray Paint a Flat Horizontal Surface

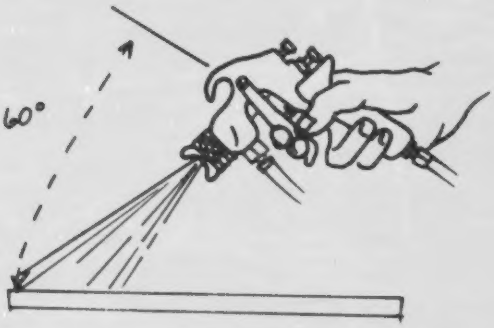
COURSE: Painting and Decorating   UNIT V: Spray Painting

OBJECTIVE: The student will be able to spray paint a horizontal surface

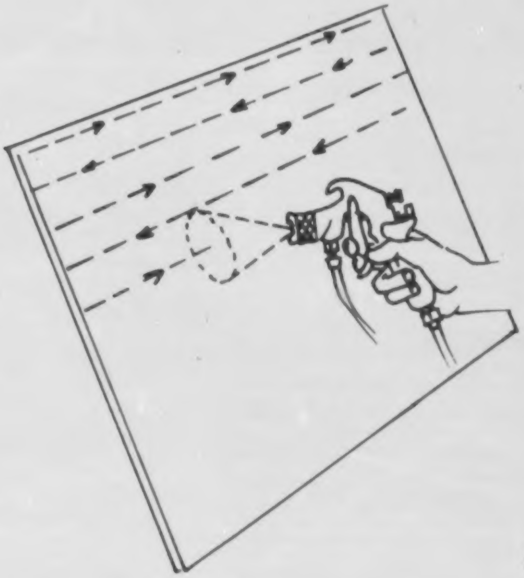
Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold the gun at a 60° angle to the surface to be sprayed.



2. Start spraying the flat surface at the near side and work toward the far side, so that the overspray falls on the uncoated surface, overlapping each stroke or pass so that the spray pattern overlaps the previous pass by 50%.



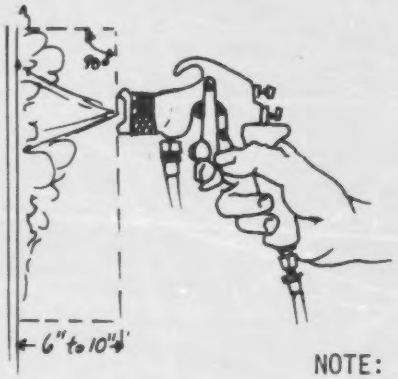
COMPETENCY: Spray Paint Vertical Surfaces

COURSE: Painting and Decorating   **UNIT V:** Spray Painting

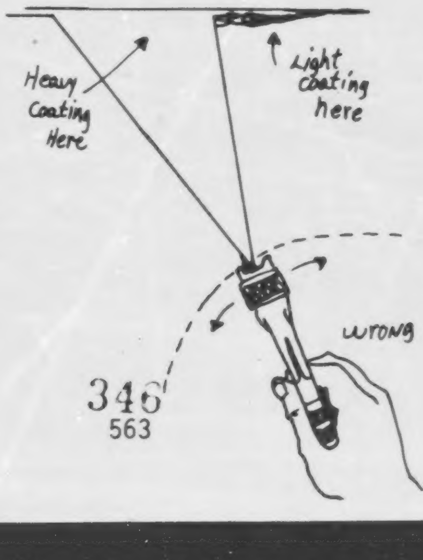
OBJECTIVE: The student will be able to spray paint a vertical surface

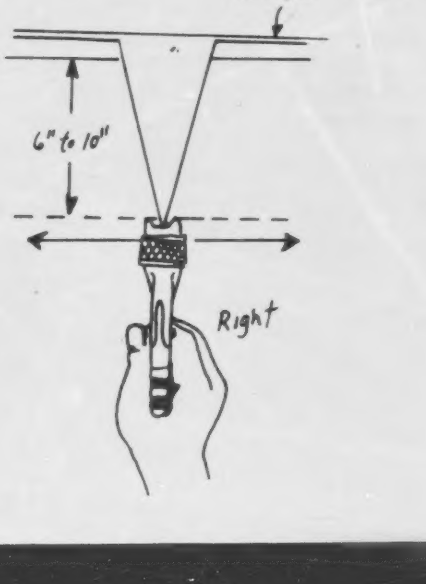
Page 1 of 2 pages

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Adjust the spray pattern to the maximum width.	
2. Pull the trigger to activate the gun a few inches ahead of the surface to be sprayed.	
3. Keep the spray gun the same distance from the surface at all times and hold the gun at a 90 angle to the surface.	NOTE: In most cases, the correct distance is 6" to 10".

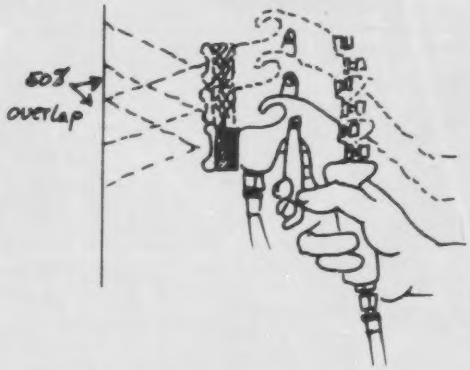


4. Move across the surface, keeping your wrist loose to avoid arcing the gun.	NOTE: Arcing the gun will apply a heavy coating in center of the work with a light coating on the edges.





COMPETENCE - PROCEDURE/STEPS	TEACHING/LEARNING ACTIVITIES
5. Work with straight, uniform strokes, moving backwards and forwards across the surface in such a way that the spray pattern overlaps the previous stroke or pass by 50%.	



OPERATION SHEET
SC-5-7

COMPETENCY: Spray Paint Narrow or Slender Surfaces

COURSE: Painting and Decorating UNIT V: Spray Painting

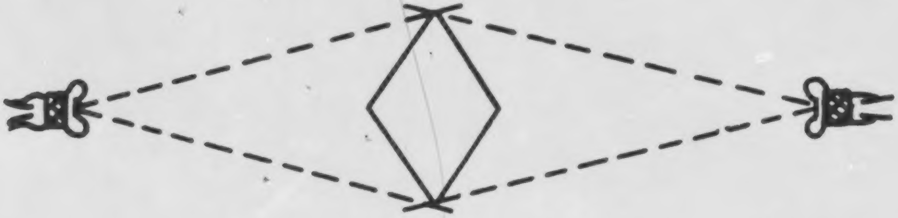
OBJECTIVE: The student will be able to spray paint narrow squares and round surfaces

Page 1 of 1 page

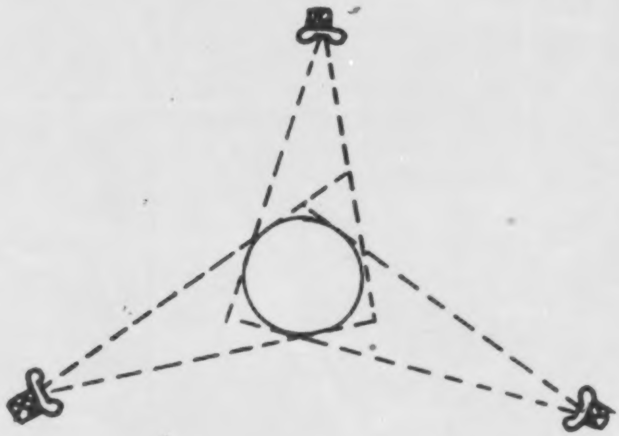
COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Adjust the spray pattern to the width of the surface to be spray painted.

2. Spray square slender surfaces by spraying from two sides to cover the surface completely.



3. Spray round slender surfaces, by adjusting the spray pattern to the diameter of the surface and spraying from three angles.



OPERATION SHEET
SC-5-8

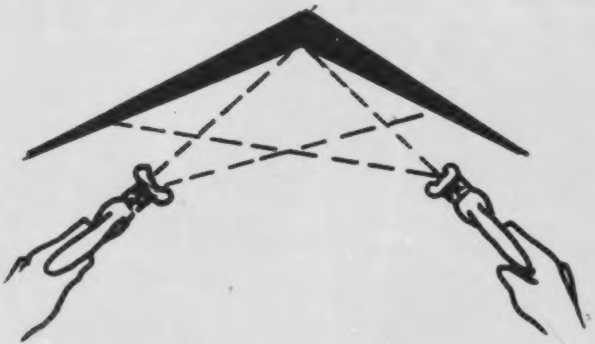
COMPETENCY: Spray Paint Inside and Outside Corners

COURSE: Painting and Decorating UNIT V: Spray Painting

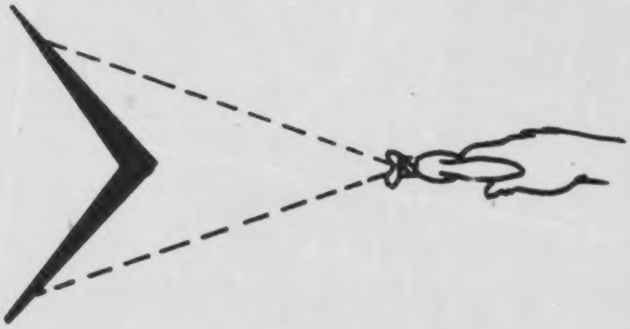
OBJECTIVE: The student will be able to spray paint inside and outside corners using proper techniques

Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES
1. Spray inside corners, by first aiming the gun at one side of the corner, then at the other side that forms the corner.	



2. Spray outside corners, by aiming the gun directly toward or at the point of the corner.	



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OPERATION SHEET
SC-5-9

COMPETENCY: Fill an Air Brush

COURSE: Painting and Decorating

UNIT V: Spray Painting

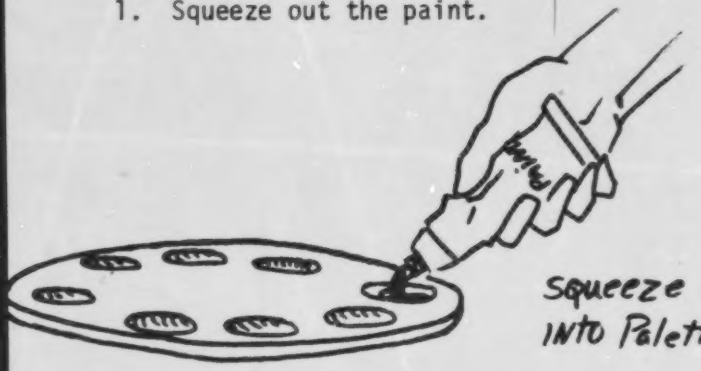
OBJECTIVE: The student will be able to properly and efficiently fill an air brush

Page 1 of 2 pages

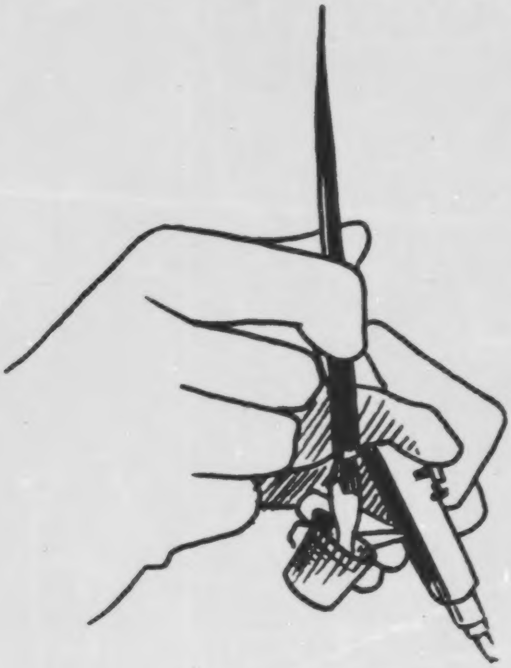
COMPETENCE - PROCEDURE/STEPS
The student will be able to:

TEACHING/LEARNING ACTIVITIES

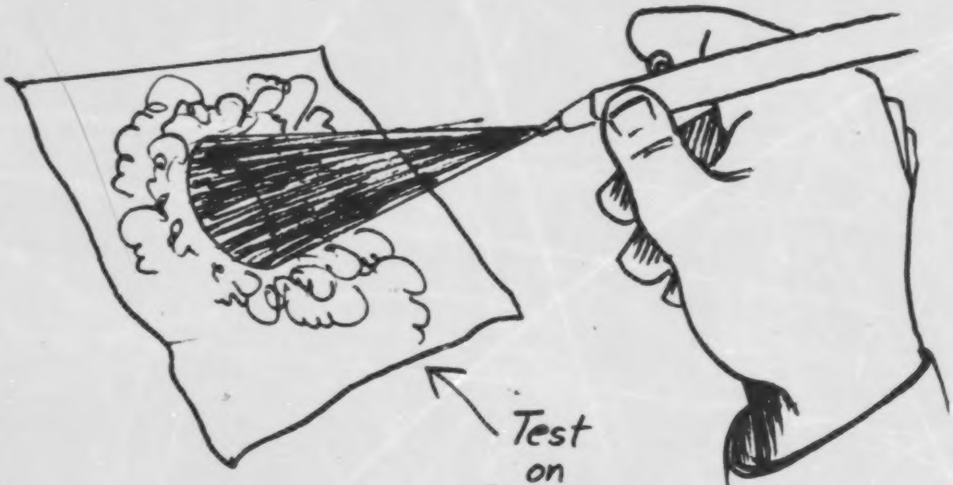
1. Squeeze out the paint.



squeeze Paint into Palette



2. Soften the paint with water in a palette.
3. Transfer the paint to the color cup with a bristle brush.
4. Test the color on a piece of scrap paper.



Test on Scrap Paper

COMPETENCE - PROCEDURE/STEPS	TEACHING/LEARNING ACTIVITIES
5. Add water or paint to get the needed paint consistency.	
6. See if color sticks to the side of the cup.	

OPERATION SHEET
SC-5-10

COMPETENCY: Clean an Air Brush

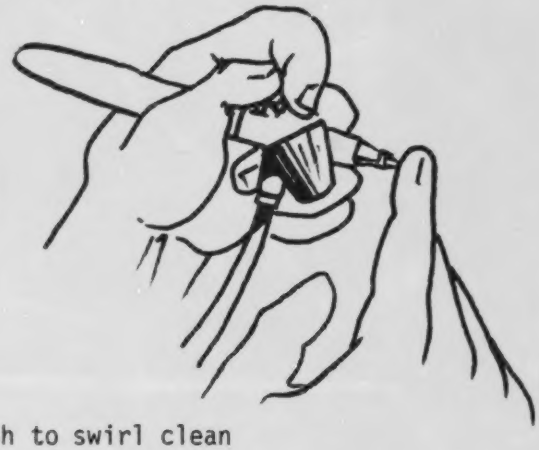
COURSE: Paint and Decorating UNIT V: Spray Painting

OBJECTIVE: The student will be able to properly and efficiently clean an air brush

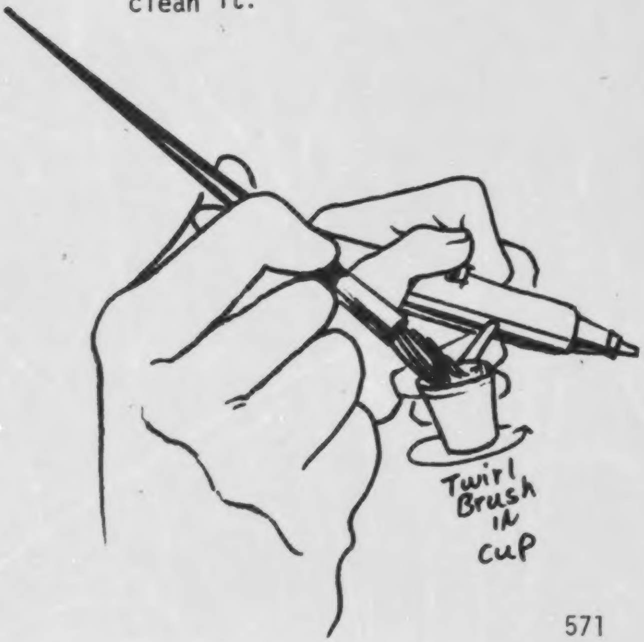
Page 1 of 2 pages

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Fill the color cup with clear water.
2. Pull down on the lever.
3. Push down for air with a finger covering the tip.

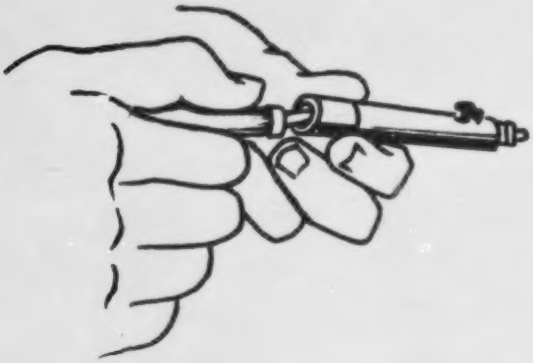


4. Use a bristle brush to swirl clean water on the inside of the cup to clean it.



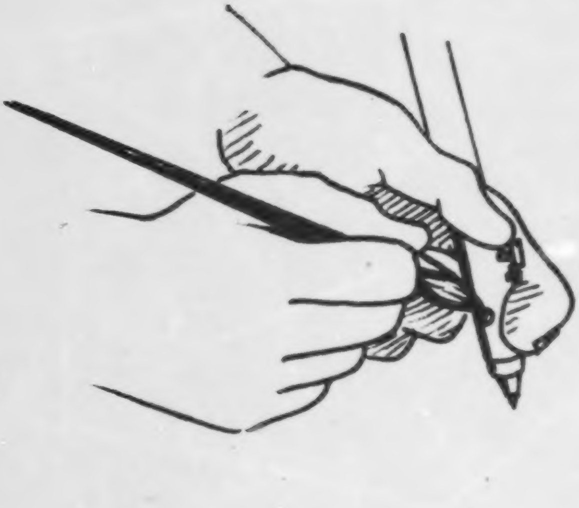
COMPETENCE - PROCEDURE/STEPS | TEACHING/LEARNING ACTIVITIES

5. Remove the needle by loosening the needle chuck and withdrawing the needle straight out.



6. Inspect for hardened paint.

7. Clean the color chamber by turning wet brush into hole that holds the cup.



OPERATION SHEET
SC-5-11

COMPETENCY: Hold an Air Brush

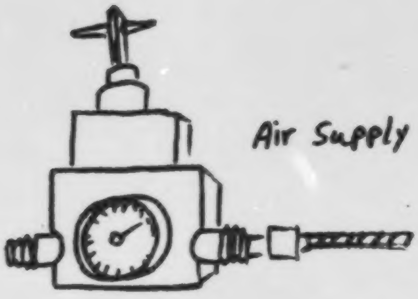
COURSE: Painting and Decorating UNIT V: Spray Painting

OBJECTIVE: The student will be able to handle an air bursh properly

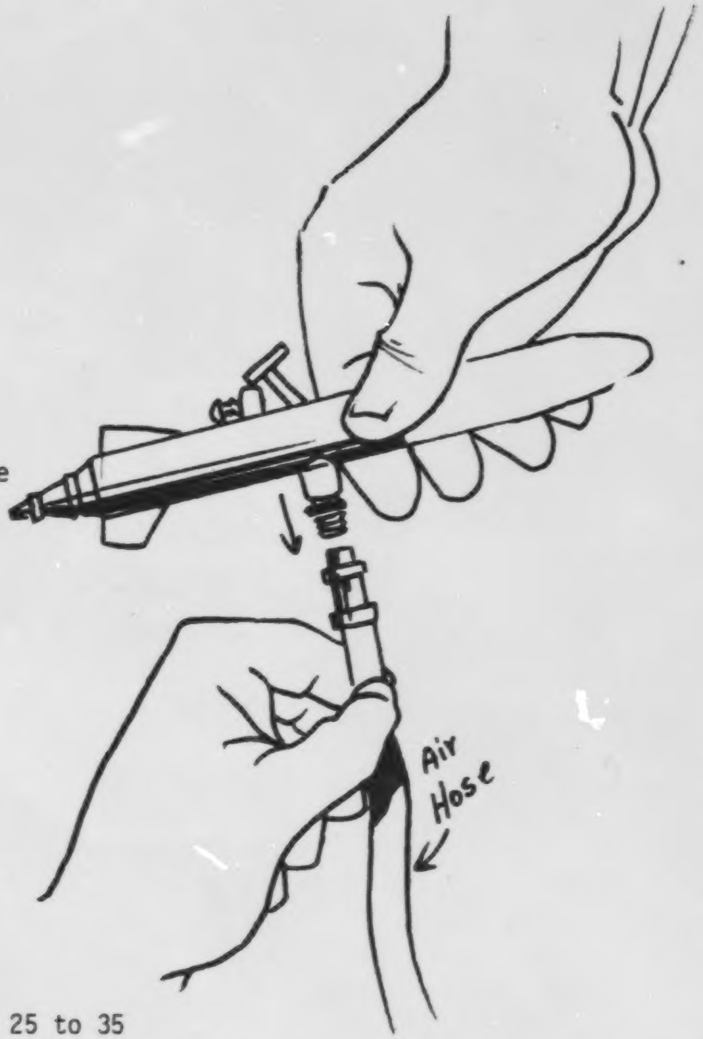
Page 1 of 2 pages

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Attach the hose to the air supply.



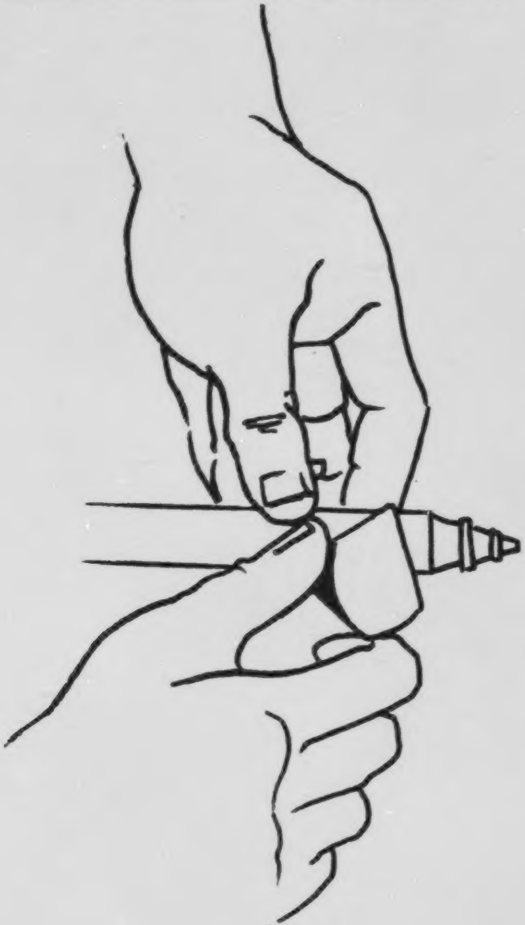
2. Turn the air brush gently into the hose fitting.



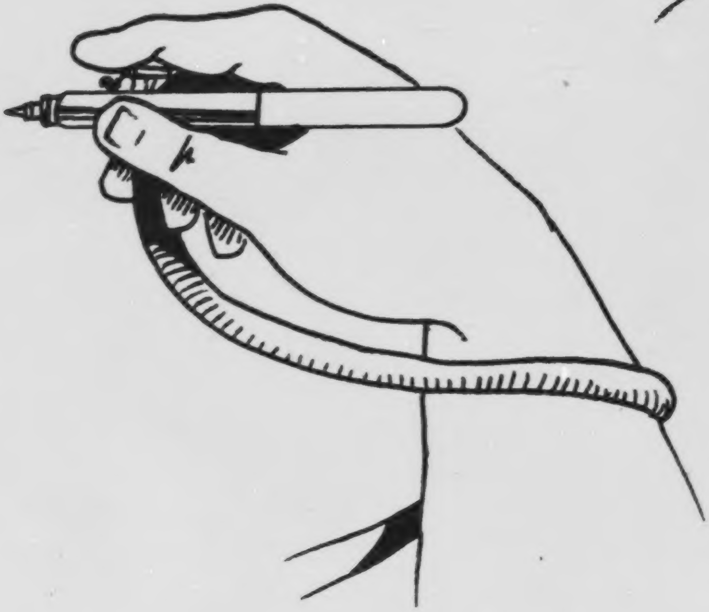
3. Regulate the air to a pressure of 25 to 35 pounds.

COMPETENCE - PROCEDURE/STEPS | TEACHING/LEARNING ACTIVITIES

4. Twist the stem of the color cup into the hole at the side of the air brush.
5. Adjust cup to tilt towards oneself.



6. Twist the hose into a loop around the wrist that will hold the air brush.



OPERATION SHEET
SC-5-12

COMPETENCY: Operate an Air Brush

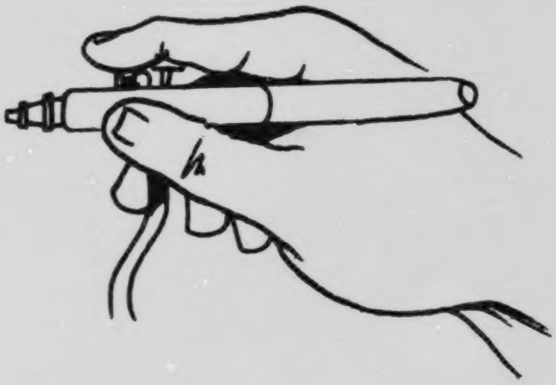
COURSE: Painting and Decorating UNIT V: Spray Painting

OBJECTIVE: The student will be able to properly and efficiently operate an air brush

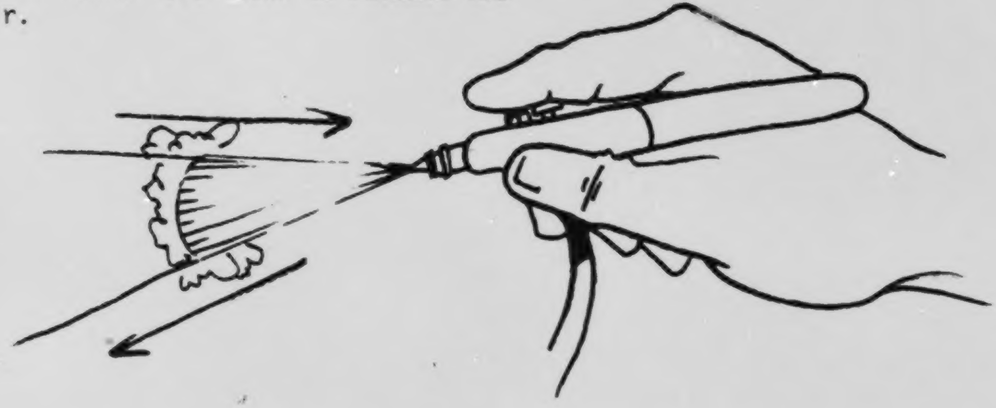
Page 1 of 1 page

COMPETENCE - PROCEDURE/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Hold air brush is an upright position about 8" away from paper.
2. Set the front lever in the first joint of the index finger.



3. Set arm into motion from right to left slowly.
4. Press front lever down to release the air.



5. With the trigger held down, pull back slowly and evenly releasing the paint.
6. Keep the arm in motion until the end of the stroke.

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OPERATION SHEET
SC-6-1

COMPETENCY: Cut Stencil with Exacto Knife

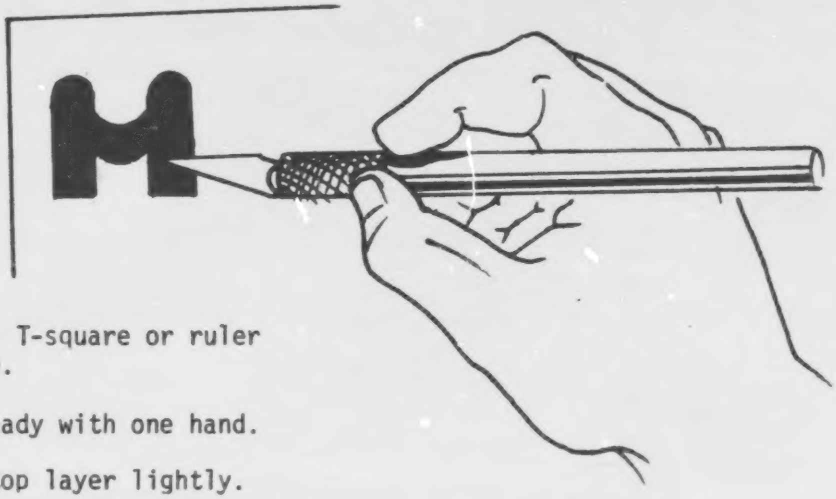
COURSE: Painting and Decorating **UNIT VI:** Special Finishes

OBJECTIVE: The student will be able to cut a stencil and lift material with exacto knife

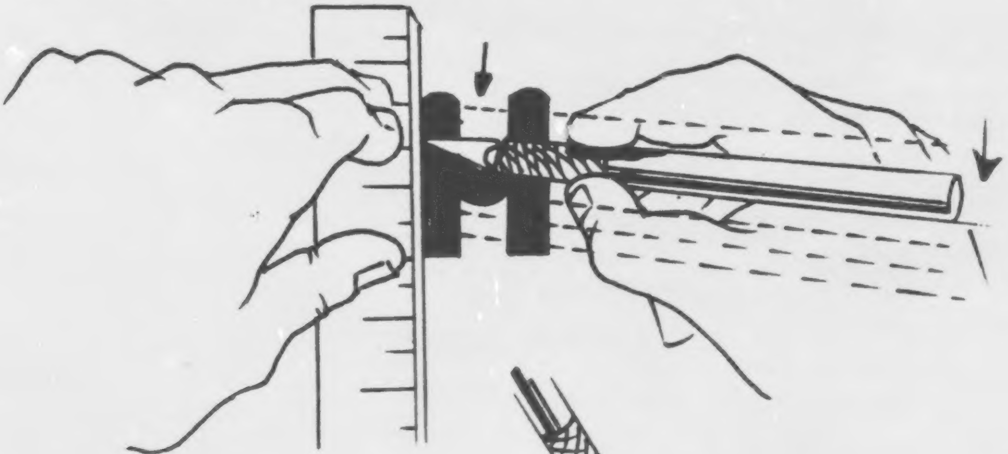
Page 1 of 2 pages

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

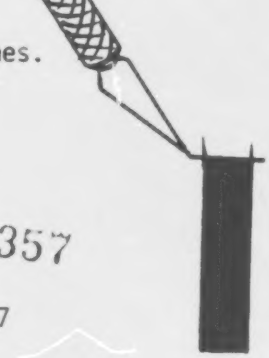
1. Hold knife near top of handle.



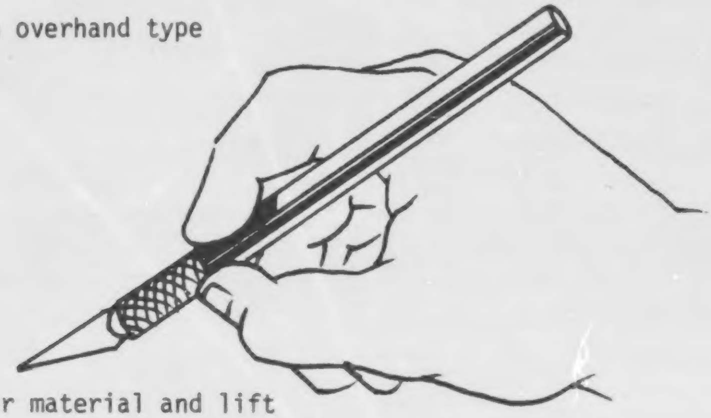
2. Place a metal T-square or ruler on guide line.
3. Hold film steady with one hand.
4. Cut through top layer lightly.



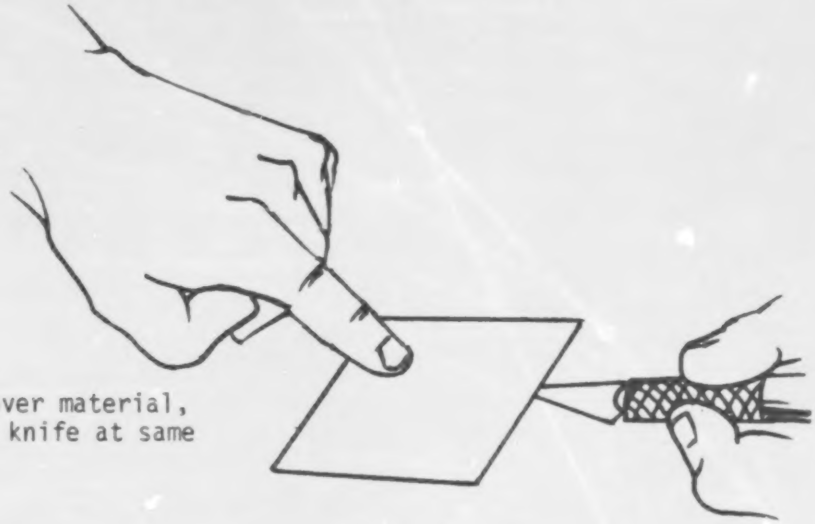
5. Cross vertical and horizontal lines.



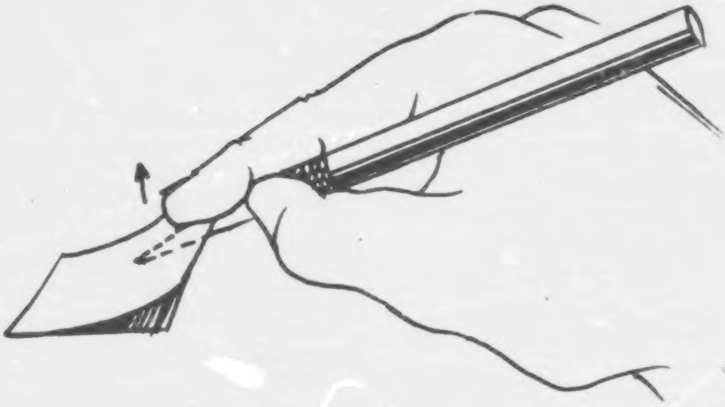
6. Hold knife using an overhand type grasp as shown.



7. Slide the blade under material and lift just a little bit.



8. Place index finger over material, pick-up material and knife at same time and reposition.



OPERATION SHEET
SC-6-2

COMPETENCY: Apply a Stencil Pattern

COURSE: Painting and Decorating

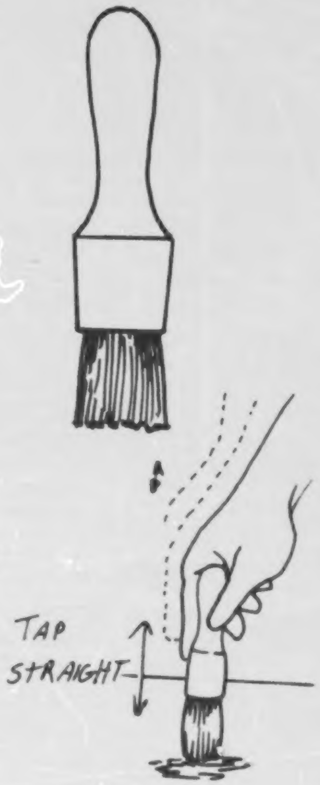
UNIT VI: *Special Finishes*

OBJECTIVE: The student will be able to apply a stencil pattern to a wall surface

Page 1 of 1 page

COMPETENCE - PROCEDURES/STEPS The student will be able to:	TEACHING/LEARNING ACTIVITIES

1. Position the stencil pattern to the reference line.

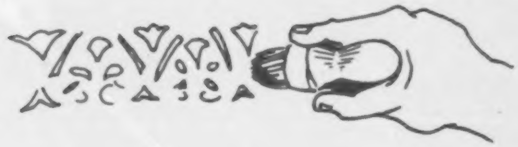


2. Secure the stencil to the surface with masking tape or hand hold the stencil.

3. Tap the tip of the stencil brush into a thin layer of paint spread on a sheet of glass or metal.

4. Apply the paint to the stencil pattern by tapping the tip of the stencil brush against the stencil.

NOTE: DO NOT use normal brush strokes to apply paint to a stencil.



INFORMATION SHEET
IL-3-1

TITLE: Abrasive Papers
Page 1 of 2 pages

COURSE: Painting and Decorating
UNIT III: Finishing

Abrasive papers are graded by the size of the cutting grains. Garnet, aluminum oxide and silicon carbide papers use either the standard grit (grain size) numbers (12 through 600 or an "0" number (1/0, 2/0, 3/0, etc.) grain size designation, or both. Emery, sand or flint papers are graded similarly.

Papers less densely coated with grit are called open coat papers. They cut slower and clog less than standard papers.

Paper backings for abrasive papers are graded A, B, C, D and E. A is the most flexible, E the least flexible. Waterproof backings are also available for wet sanding.

The most often used grit sizes and their uses are listed in the chart below. Hardwoods are best sanded with each listed grade in sequence. Any time apparently saved by skipping a grit size or two may be lost because of the extra time necessary to smooth out sanding marks made by the previous coarser grit size. Softwoods (pine, fir, spruce, redwood, etc.), can be satisfactorily smoothed by using only those grades marked by an asterisk.

The grit sizes are listed from the largest or coarsest grit sizes, at the top of the chart, to the smallest or finest grit sizes at the bottom of the chart. Coarser grit sizes, up to number 12, are available but seldom if ever used in the painting trade.

Intended Use	Silicon Carbide	Aluminum Oxide	Garnet	Recommended Backing Guide	Equivalent "O" Series Number	Flint	Emery
	Grit Number						
Gross surface removal, shaping and leveling.	50	50	50	D	1	1½	2
	60	60	60	D	1/2		1½
	80*	80	80	D	1/0	1/2	1
Initial smoothing steps.	100*	100	100	C	2/0	1/0	
	120	120	120	A or C	3/0		1/0
Intermediate smoothing steps, often skipped, but which are worth using when aiming for the fastest route to the finest finish.	150*	150	150	A	4/0	2/0	2/0
	180	180	180	A	5/0		3/0
Fine smoothing on wood surfaces.	220*	220	220	A	6/0	4/0	
Final sanding on harder, denser woods, and between coat sanding.	240	240	240	A	7/0		
	280	280	280	A	8/0		
	320	320		A	9/0		
Wet sanding-using water or oils-on finish top coats to obtain eggshell or semigloss surface.	360						
	400	400		Waterproof	10/0		
	500	500		Waterproof	11/0		
	600	600		Waterproof	12/0		

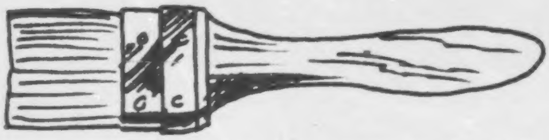
INFORMATION SHEET
IL-3-2

TITLE: Types and Styles of Paint Brushes Page 1 of 2 pages

COURSE: Painting and Decorating UNIT III: Finishing

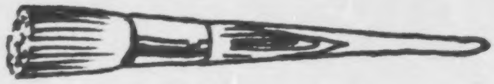
There are many sizes and styles of paint brushes which are used by the painter. Many times, personal preference determines the style of brush you will use for a particular job. In order for the apprentice painter to be able to select the proper brush, he must first become familiar with the various styles and sizes of paint brushes which are available for his use. Below are listed several common types and/or styles of brushes most commonly used in the trade.

FLAT SASH AND TRIM



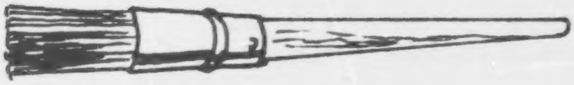
Flat sash and trim are made in 1", 1 1/2", and 2" sizes. The bristle length varies from 2 to 3 1/2 inches.

OVAL SASH AND TRIM



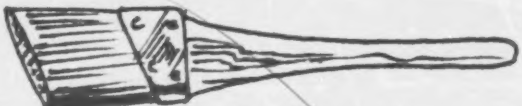
Oval sash and trim are sized #2 (the smallest), #4, #6, #8, #10, #12 (the largest). Bristle length also varies from 2 to 3 1/2 inches.

FITCH



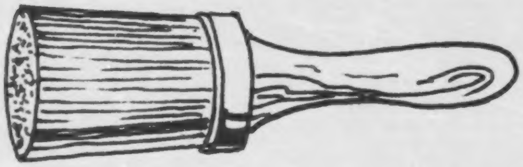
Fitches are a group of small and various shaped brushes. 1/2" to 1 1/2" sizes, oval shaped, commonly used in the trade. Distinguished by long, slender handle.

ANGULAR SASH AND TRIM



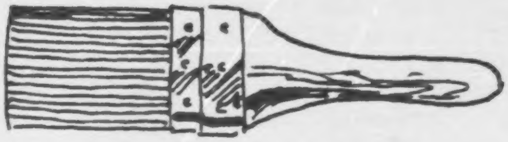
Angular cut sash brushes available in sizes 1", 1 1/2", and 2". Bristle length ranges from 1 1/2" to 3". Identified by angular bristle end.

OVAL PAINT AND VARNISH



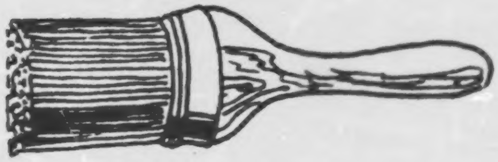
Oval paint brushes are a refinement of the old style "pound brush". They are designated as number 2-0 up to 12-0. Ovals have seamless steel ferrules. They are available with both open and solid center construction.

FLAT BRUSH



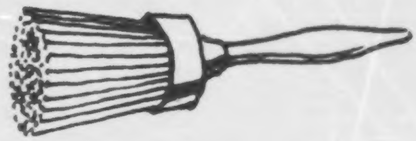
Flat brushes range in thickness from 3/4" to 1" and up to 4" in width.

SEMI-OVAL PAINT AND VARNISH



Semi-oval brushes in widths of from 2" to 3" used for varnishing and enameling. Semi-ovals are nearly flat with rounded ends and a slight expansion in the center of the width.

ROUND DUSTER



Both round and flat dust brushes are used by painters. The quality of dusters vary considerably.

INFORMATION SHEET
IL-3-3

TITLE: Construction of a Paint Brush | Page 1 of 1 page

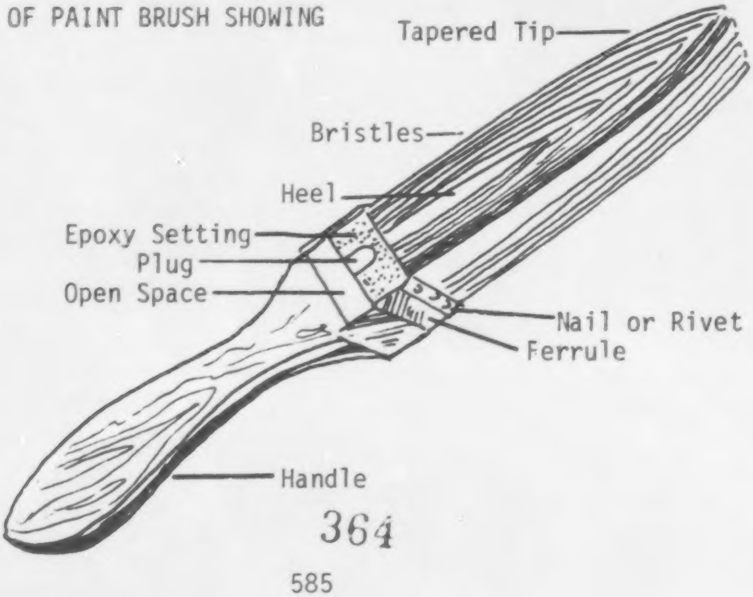
COURSE: Painting and Decorating | UNIT III: Finishing

It is essential that every student of the painting trade be familiar with the construction of a paint brush and that he know the terms referred to in describing the various parts of the construction of a brush. Each job requires its own kind of brush. There is a variety of brushes available in a great range of sizes and costs. However, most paint brushes are made in the same way. Bargain brushes may be assembled automatically but good brush making is still a hand-crafted skill.

MAIN PARTS OF A PAINT BRUSH

1. The handle is usually made of wood.
2. The ferrule is a metal wrapping that holds the bristles to the handle.
3. The bristles are the part of the brush that holds the paint. There are many kinds of bristle. The type you choose will depend on the job you are doing.
4. The divider or wooden plug is a wedge around which the bristles are fastened to form a flat or round shaped brush.
5. The epoxy setting is the material that holds the bristles together, and prevents their falling out of the brush.
6. Nails or rivets hold the ferrule to the handle.
7. The tapered tip of the brush is formed by the blending of long and short lengths of bristle.
8. The heel of the brush is an open space formed by the plug in the center of the brush to increase paint pick-up.

SECTIONAL VIEW OF PAINT BRUSH SHOWING VARIOUS PARTS.



INFORMATION SHEET
IL-3-4

TITLE: Types of Bristles Used to Make Paint Brushes

Page 1 of 2 pages

COURSE: Painting and Decorating

UNIT III: Finishing

Several types of bristle material are used to make paint brushes. The type of bristle used to make a paint brush greatly affects the cost and performance of the brush. The type of bristle you choose will depend on what kind of paint you are using. A type of bristle that is good for oil paint may be ruined by water based paints. Some bristles must be specially treated before they are used. This special treatment can make it impossible for the brush to be used with certain paints. You should know the characteristics of various bristles so that you will know when to use which type.

TYPES OF BRISTLE

Hog Bristles

Hog bristles are excellent for brushing oil paints. They are available in three types, all of which have these characteristics:

(a) One end of each bristle is flagged (split into fine hairs). These flagged ends trap and hold the paint.

(b) The bristles are tapered. The paint flows from the thick end of the bristle to the thin end. Tapered bristles spring back into shape after they have been bent.

(c) The bristles are oval in cross section.

(d) The surface of the bristle is covered with pores that help to trap and hold the paint.

Nylon Bristles

Brushes with nylon bristles are especially useful in applying water paints. In the past, nylon bristles were unsuitable for use in oil paints. Today, nylon bristle brushes are becoming widely accepted in place of hog bristle brushes for applying oil paint. This change is caused by a number of factors.

1. Since most of the hog bristles used for making brushes comes from China, the supply is very uncertain. As the supply gets smaller, the cost gets higher. Nylon bristles can be made very cheaply.

2. New manufacturing methods produce nylon bristles that match the characteristics of hog bristle. Old style nylon bristles did not have flagged ends, and had no pores. The result was that the bristles were not able to hold much paint.

3. Nylon bristles need no preconditioning.

For applying water paints, nylon bristle brushes are used almost exclusively. There are several reasons for this fact.

1. Nylon bristle does not absorb water. Hog bristles will go limp and useless if they are used in water paints. Water is absorbed into the bristle through the pores. When the water is absorbed, the hog bristle swells, and becomes useless.

2. Nylon bristles are easy to clean. Hog bristles have scales that trap paint, whereas nylon bristles are smooth. Running water washes away excess paint from nylon very easily.

Other Types of Bristles

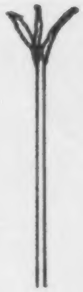
1. Horsehair bristles are used to make dust brushes and floor sweeping brushes.

2. Sable bristles are used to make artist's brushes and lettering brushes.

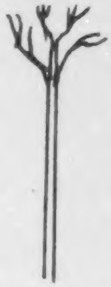
3. Camel hair bristles are used to make varnish brushes, lacquer brushes, and high-gloss enamel brushes. Although called camel hair, the bristles actually come from a kind of squirrel that lives in Siberia.

Under magnification, the various types of bristle described earlier would appear as illustrated below.

A



B



C

A. Horse hair does not taper, is round and is not split.

B. Hog bristle tapers from the butt to the tip of the bristle. The tips are split or flagged.

C. Good nylon bristle is tapered and is flagged into several hair-like spreaders at the tip.

INFORMATION SHEET
IL-3-5

TITLE: Solvents Used for Brush Cleaning | Page 1 of 1 page

COURSE: Painting and Decorating | UNIT III: Finishing

MATERIALS / SOLVENT	Turps	Mineral Spirits	Lacquer Thinner	Water	Water and Amonia	Water and Detergent	Gasoline (Unleaded)	Kerosene	Alcohol	Benzol	Xylol	Acetone	Naphtha	M.E.K.
Varnish	X	X	X			X	X	X		X		X	X	X
Oil Stain	X	X	X			X	X	X		X		X	X	X
Interior Enamel	X	X	X			X	X	X		X		X	X	X
Exterior Oil Paint	X	X	X			X	X	X		X		X	X	X
Porch and Trim Enamel	X	X	X			X	X	X		X		X	X	X
Latex Paint and Stains				X		X				X				
Emulsions				X		X				X				
Polyurethanes			X							X	X	X		X
Epoxies			X							X	X	X		X
Lacquers			X							X		X		X
Schellac					X				X					

INFORMATION SHEET
IL-3-6

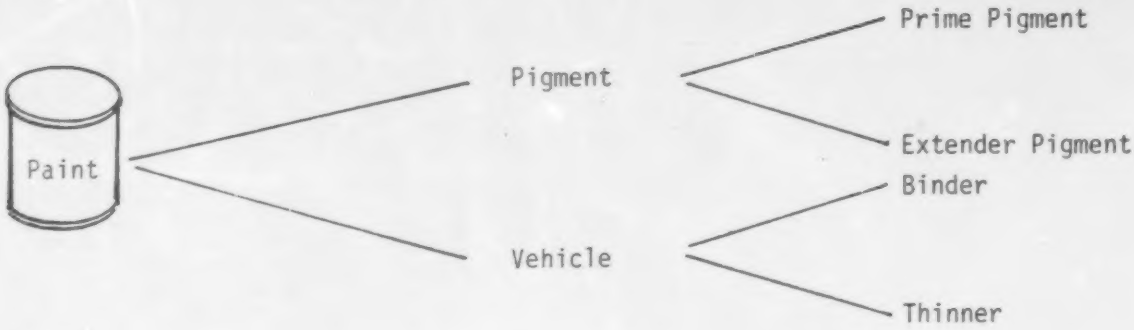
TITLE: The Composition of Paint
Page 1 of 2 pages

COURSE: Painting and Decorating
UNIT III: Finishing

Before a person can do a good job in any field, he must know something about the product he uses. What is it? How is it made? What does it do? Paint is a semi-liquid made of a pigment or pigments dispersed in a liquid known as a vehicle. It is applied to a surface to provide that surface with a protective, decorative or a functional coating.

Paint can be opaque, or it can be transparent. Opaque paint completely hides the surface being painted. Transparent paint is clear, like glass. Paint can also be semi-transparent, like stain, which hides only a little of the surface that is covered.

Listed below, is the basic composition of paint and the definitions and descriptions of the various components of paint.



PAINT is pigment and suitable vehicle which forms a solid adherent film when spread on a surface in a thin coat.

PIGMENT is finely divided solid material which when dispersed in a paint imparts color, capacity and consistency.

PRIME PIGMENTS contribute largely to the principle function of the paint, protective, decorative, or functional qualities.

EXTENDER PIGMENTS contribute incidentally to the main purpose of the paint but add other desirable properties.

VEHICLE is the liquid in which the pigment is dispersed and serves as the carrier for the pigment.

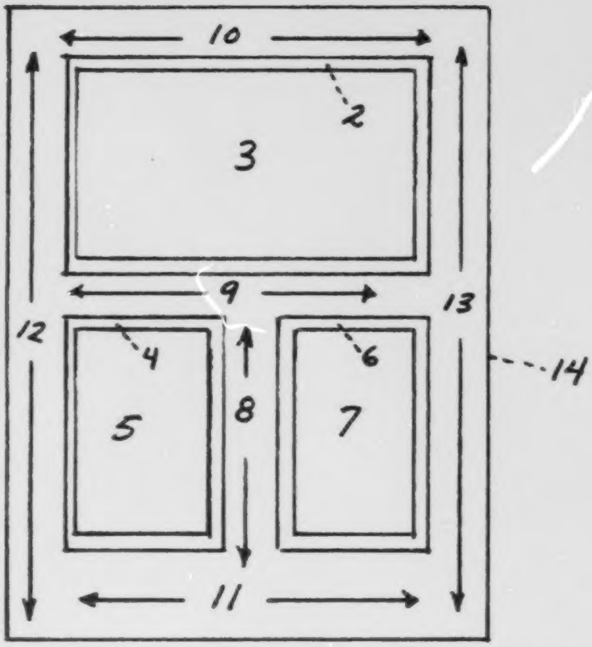
BINDER is the medium which binds the pigment particles together and gives strength and life to the paint.

THINNER reduces the consistency of the paint and makes it easier to apply.

INFORMATION SHEET
IL-3-7

TITLE: Steps in Painting Panelled Door
Page 1 of 1 page

COURSE: Painting and Decorating
UNIT III: Finishing



1. Paint the frame and casing as outlined in the steps for painting a flush door.
2. Paint the molding around the top panel.
3. Paint the top panel. Apply the paint in the direction of the grain of the wood to cover the entire panel. When the panel is covered, brush across the grain of the wood. Finish by brushing very lightly with the grain of the wood.
4. Paint the molding of one of the bottom panels
5. Paint the panel as described above.
6. Paint the molding of the other panel.
7. Paint the panel.

8 thru 13.
Paint the stiles of the door in the order marked on the diagram.

14. Paint the edge of the door. Brush out any heavy edges.

NOTE:

1. Refer to operation sheet "Painting a Flush Door" and check the section on points to remember about painting doors.
2. Panelled doors may contain 2 to 6 or more panels. The same basic procedure would be followed as outlined in this diagram for painting a 3 panel door: starting with the top panel.

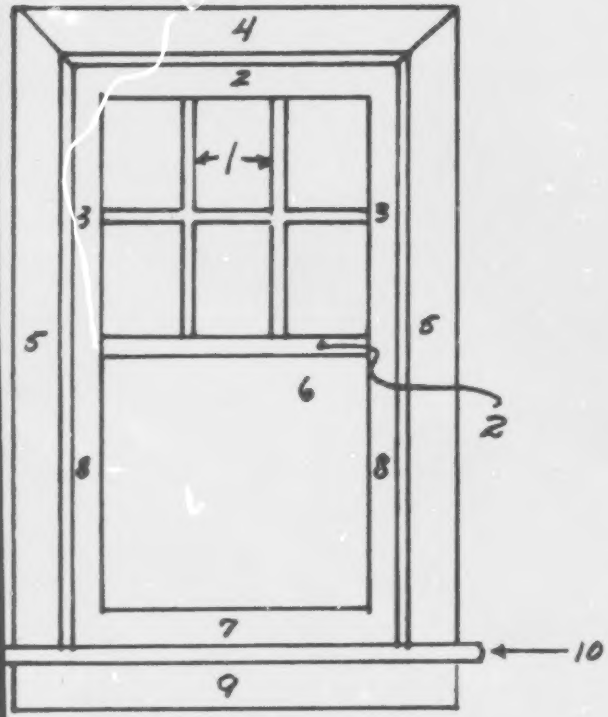
INFORMATION SHEET
IL-3-8

TITLE: Paint a Window Sash and Frame

Page 1 of 1 page

COURSE: Painting and Decorating

UNIT III: Finishing



1. Paint all the mullions of the upper sash.
2. Paint the horizontal style and the meeting rail of the upper sash.
3. Paint the vertical styles of the upper sash.
4. Paint the top casing and window stop.
5. Paint the two side casings and window stops.
6. Paint all the mullions of the lower sash.
7. Paint the horizontal styles of the lower sash.
8. Paint the vertical styles of the lower sash.
9. Paint the window apron.
10. Paint the window stool.

POINTS TO REMEMBER ABOUT PAINTING WINDOWS:

1. Use a 1" sash brush to paint the mullions. Do not get any paint on the glass.
2. The window casing can be painted more easily and quickly with a 2" brush.
3. Leave the upper and lower sash open slightly to make it easier to open the window after the paint dries.
4. After the paint starts to dry, check for runs and sags.

INFORMATION SHEET
IL-3-9

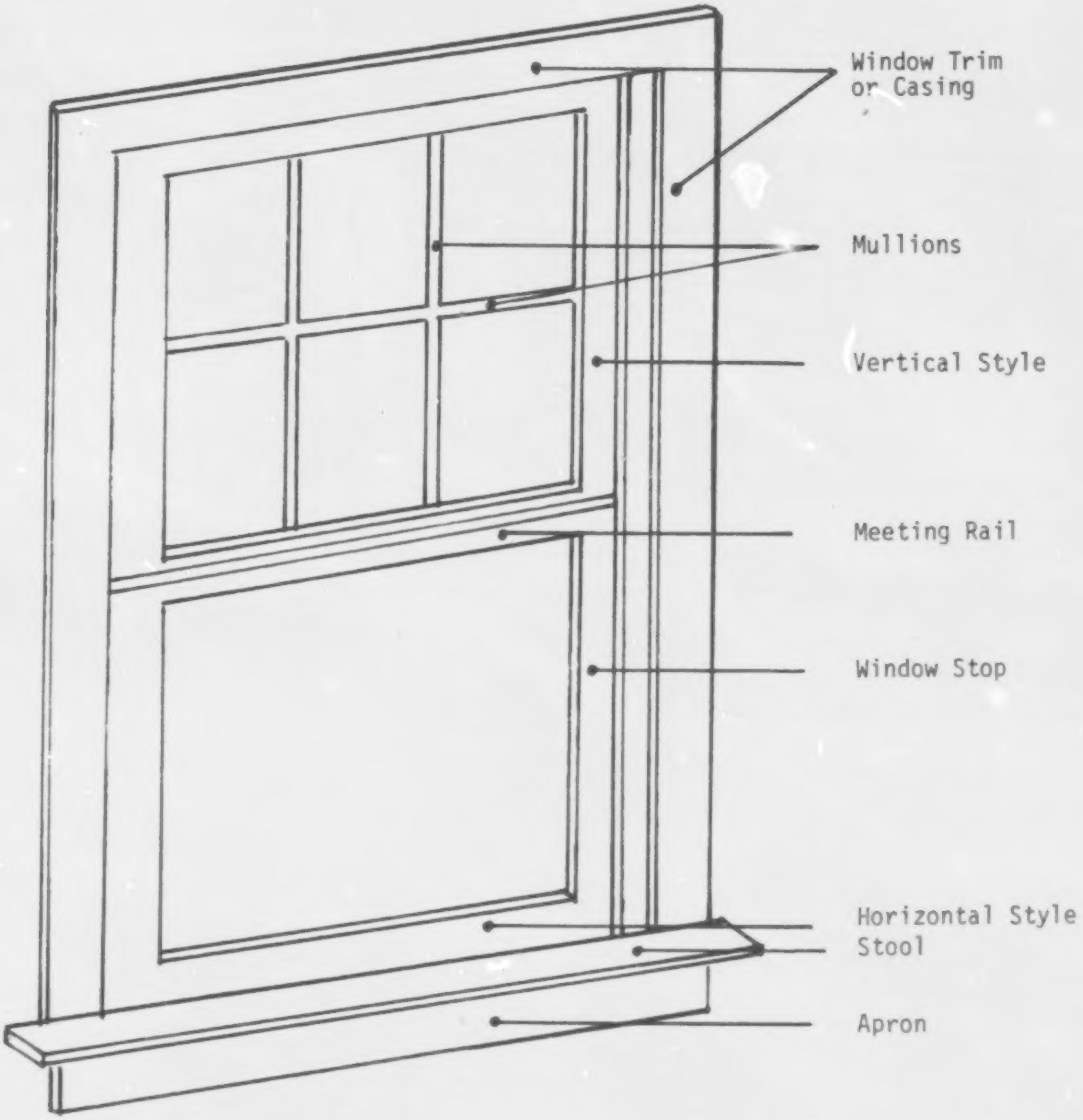
TITLE: Terms Used in Reference to the Construction of an Interior Window

Page 1 of 1 page

COURSE: Painting and Decorating

UNIT III: Finishing

Every student should know and be able to identify the various parts in construction of a window sash and frame. The illustration below lists the parts of a typical window construction and the terms used to identify these parts.


Window Trim or Casing
Mullions
Vertical Style
Meeting Rail
Window Stop
Horizontal Style
Stool
Apron

The window construction or the sash placement of the above illustration is identified and referred to as a double hung sash installation. This is the most common type of window construction.

INFORMATION SHEET

IL-3-10

TITLE: Safety Factors in Placing an Extension Ladder

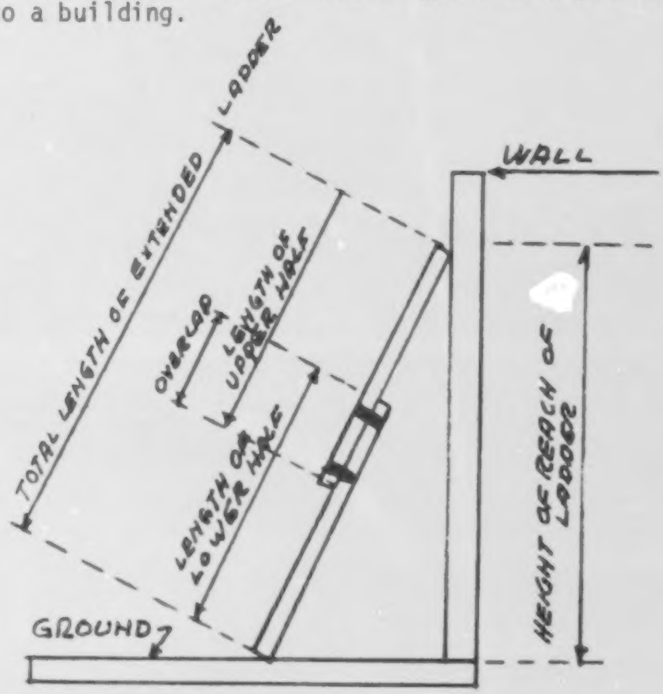
Page 1 of 1 page

COURSE: Painting and Decorating

UNIT III: Finishing

Much of a painter's time is spent working from some kind of ladder. Every worker must be aware of the dangers involved in the use of ladders and must at all times follow those procedures that will assure his own safety and the safety of others.

The drawing below shows how an extension ladder would appear when placed at a safe and approved angle to a building.


TOTAL LENGTH OF EXTENDED LADDER
WALL
LENGTH OF UPPER HALF
OVERLAP
LENGTH OF LOWER HALF
HEIGHT OF REACH OF LADDER
GROUND

Size of ladder	Length of each of 2 sections	Maximum extended length of ladder	Recommended distance of ladder from building
20 ft.	10 ft.	17 ft.	4 ft. - 3 in.
28 ft.	14 ft.	25 ft.	6 ft. - 3 in.
36 ft.	18 ft.	33 ft.	8 ft. - 3 in.
44 ft.	22 ft.	40 ft.	10 ft. - 0
48 ft.	24 ft.	44 ft.	11 ft. - 0
60 ft.	20 ft. (sections)	54 ft.	16 ft. - 0

REMEMBER: No ladder is foolproof, but a ladder can be accident proof!

INFORMATION SHEET
IL-3-11

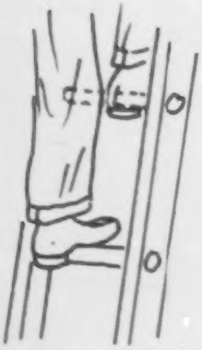
TITLE: Safety Rules When Working With and From Straight or Extension Ladders
Page 1 of 2 pages

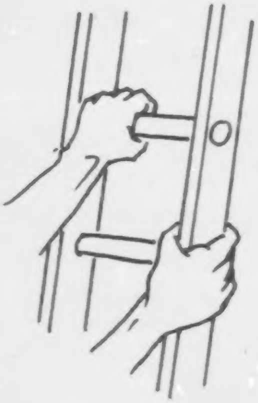
COURSE: Painting and Decorating
UNIT III: Finishing

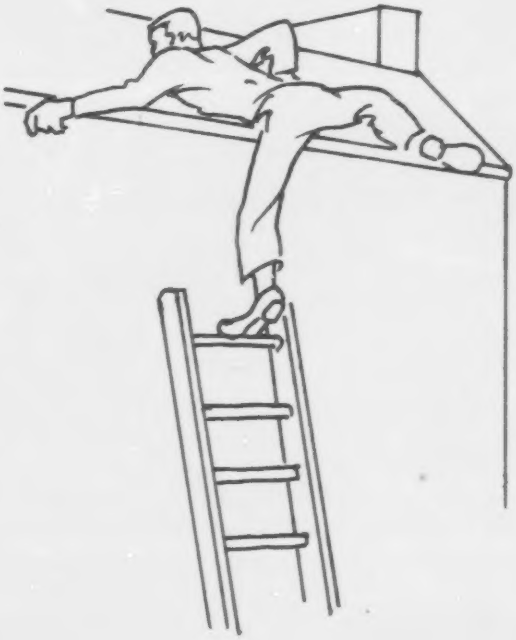
As many as 70 percent of the serious injuries to painters are caused by falls. Most of these accident are not caused by faulty equipment, but by workmen who do not comply with or follow safety regulations. Certain basic rules for working from a ladder must be observed to avoid or keep these accidents to a minimum.

REMEMBER: No ladder is foolproof, but a ladder can be accident proof!

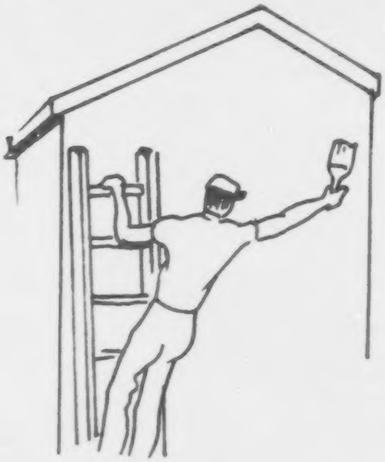
Learn to climb a ladder properly. Place feet squarely on rungs, and grip the ladder firmly with hands. Do not climb over top of ladder.

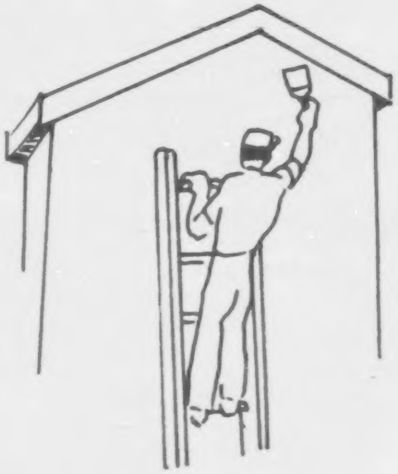




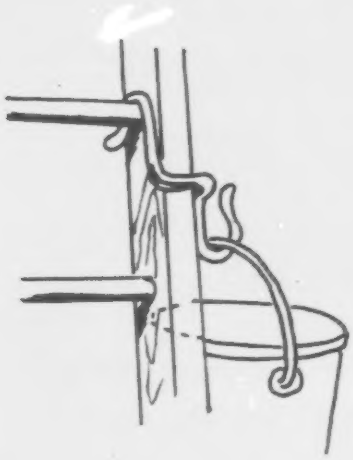


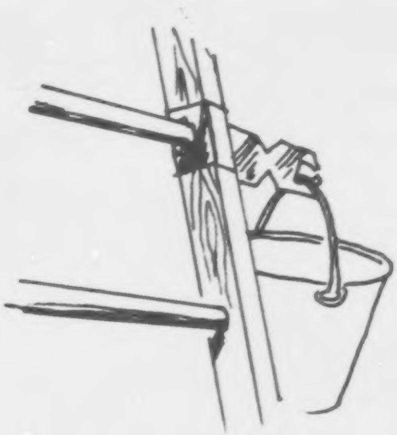
When working on a ladder, set the ladder where object can be reached comfortably. Never lean out too far on one side.





Never try to hold the paint pail with one hand and paint with the other. Always use a hook to hang the paint pail securely to the ladder.





INFORMATION SHEET
IL-3-12

TITLE: Repainting Wood Surfaces--Types of Paint Failures and Their Causes

Page 1 of 2 pages

COURSE: Painting and Decorating

UNIT III: Finishing

A successful repainting job cannot be achieved without first examining the old paint film for evidence of coating failure. The most common paint failures on previously painted interior and exterior surfaces are covered in this lesson. If an old paint film shows any of these problems or defects, the old paint must be removed. Paint can be removed by scraping and sanding, with paint and varnish remover, or by burning. The bare wood can than be treated as if it were a new wood surface.

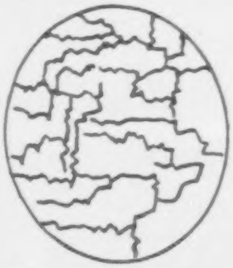
MOST PAINT FAILURES CAN BE AVOIDED BY FOLLOWING GOOD PAINTING PRACTICES!

The most common causes of paint failure are:

1. Improper preparation of the surface.
2. Improper application of paint, namely, the wrong type of paint for a given surface and failure to follow manufacturer's specific directions.
3. Use of poor quality paint.
4. Neglect in studying the existing conditions of a surface to be painted, to determine whether it is suitable for repainting.
5. Ignoring atmospheric conditions when painting.

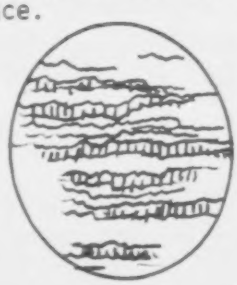
A painter must become familiar with the appearance of common paint failures and their probable or most common causes.

Alligatering--paint film cracking in large pieces. Little or no paint loosened from the surface.



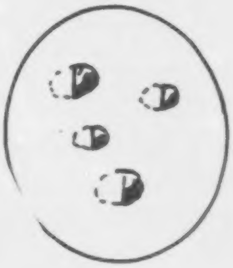
Causes:
  a. Soft undercoat
  b. Insufficient drying of the undercoat
  c. Paint film too thick.

Check--short, fine cracks on a painted surface.



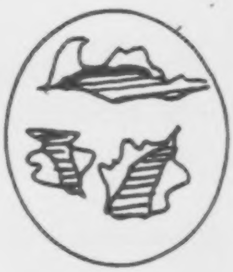
Causes:
  a. Causes much the same as those listed for alligatoring
  b. Topcoat too hard

Blistering--bubbles forming on a painted or varnished surface.



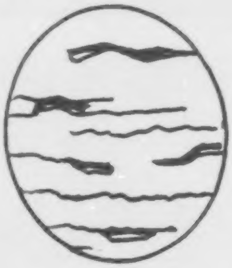
Causes:
  a. Moisture within or upon the surface to which paint is applied

Peeling--paint coming away from the surface in large pieces.



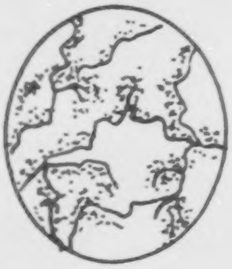
Causes:
  a. Undercoat too hard-poor adhesion
  b. Surface of wood wet when painted
  c. Moisture collecting in back of painted surface

Cracking--usually fine cracks in the paint film which follow the grain of the wood.



Causes:
  a. Shrinkage of the wood
  b. Build-up of paint film too

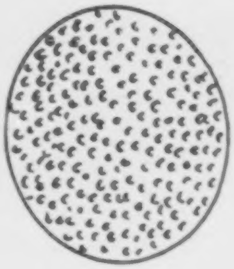
Wrinkling--small vein-like ridges formed on the surface.



Causes:
  a. Paint forming a skin befor the paint dries completely through its full thickness

Orange Peel--circular crater-like formations. Uneven film thickness.

Causes:
  a. Occurs only on spray painted films
  b. Improper solvent used to thin the paint
  c. Insufficient atomizing air



INFORMATION SHEET
IL-3-13

TITLE: Paint Failures Due to Moisture | Page 1 of 3 pages

COURSE: Painting and Decorating | UNIT III: Finishing

There are three principal sources of moisture that can affect paint--exterior leaks, vapor from the ground, and vapor laden air within the structure. Moisture in walls and attics is often caused by actual leaks. These leaks can be prevented by attention to certain details, such as flashing, gutter replacement and eave protection as required to provide weatherproof construction of roofs, eaves and outside walls.

Chimney flashing should be secured in mortar joints and overlapped to divert water to top surfaces of shingles. Fig. 1

To prevent water damage, gutters should be placed so the top front edge of the gutter is even with the extended shingle line. Fig. 2

Water sometimes freezes solid in gutters, causing ice jams. As it thaws it may back up underneath the shingles and cause damage to walls and interiors. This may be prevented by laying a course of heavy asphalt saturated felt over the eaves and well past the inside wall line. Fig. 3

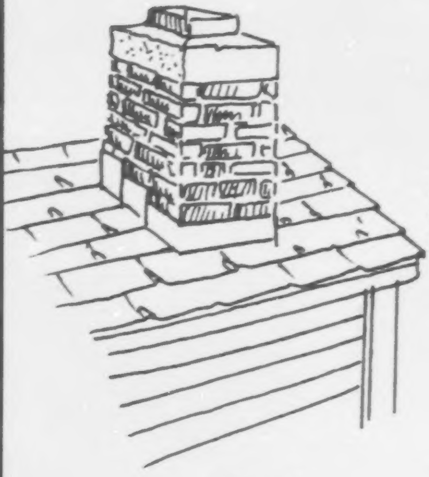


Fig. 1.

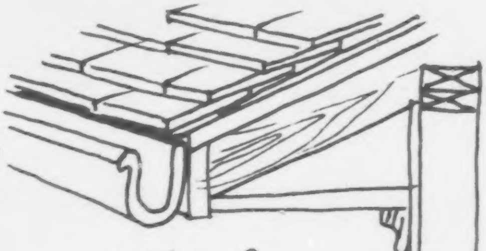


Fig. 2.

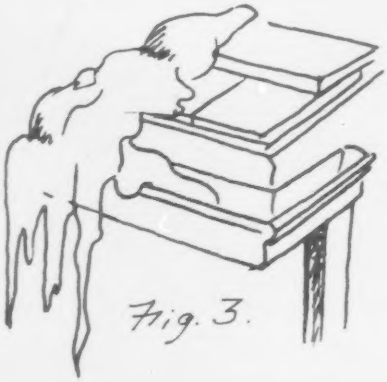


Fig. 3.

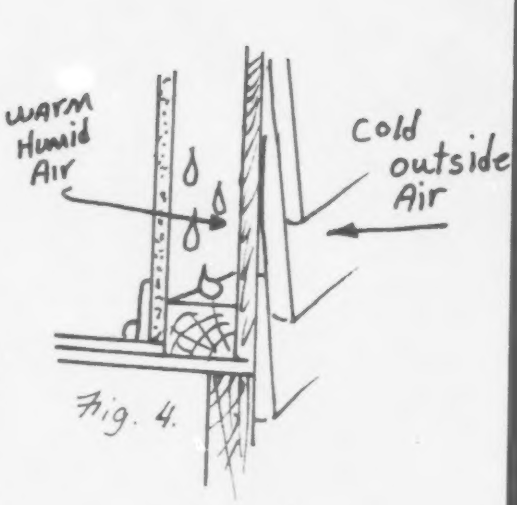


Fig. 4.

All air contains moisture in varying degrees. The warmer the air the more moisture it will hold. When warm, moist air inside a house comes in contact with the outer part of the wall, some of the moisture condences into water. Fig. 4 This condensation is most common in today's tightly-built and insulated homes.

When air contains as much water vapor as it can hold at a specific temperature, it is said to be saturated and to have a relative humidity of 100 per cent. The temperature is known as the dew point temperature of the air. When the air is cooled more, by coming in contact with a cold surface, such as the exterior wall of a house, condensation will occur, and minute beads of moisture will form on the colder surface. To prevent excess accumulation of moisture, preventive steps should be taken. Condensation of moisture in exterior walls and ceilings varies with locality and type of construction. It is always recommended that vapor barriers be used when insulation is used, and in localities where winter temperatures reach the freezing point or below.

A vapor barrier is a material or combination of materials--insulation with a vapor barrier on the back, paper backed with metal foil, asphalt-impregnated paper, which stops the passage of air-borne moisture into walls, floors and ceilings. There are different types of barriers but the principle is the same in each; they simply act as a "vapor-proof wrapper" for the house. Vapor barriers are applied on the room side of the studding.

Where there is no basement underneath a house, the crawl space should be well ventilated to prevent moisture from accumulating in this area. Screened vents should be placed as high as possible in the foundation and located to provide cross ventilation. Fig. 5

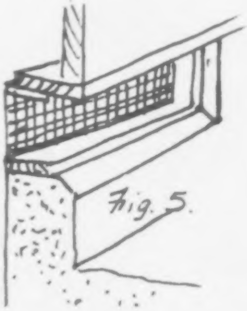


Fig. 5.

Ventilation should be provided for attics or any space beneath different types of roof construction. Proper ventilation carries away moisture-ladden air before the moisture condenses. Fig. 6

Proper ventilation should also be provided flat and shed-type roofs. Fig. 7

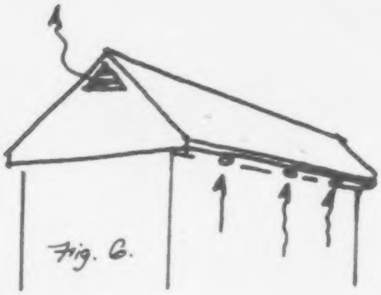


Fig. 6.

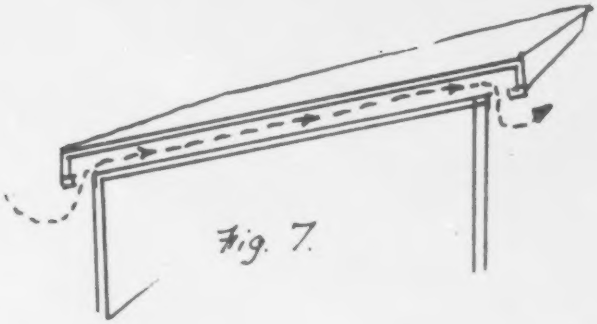


Fig. 7.

INFORMATION SHEET
IL-3-14

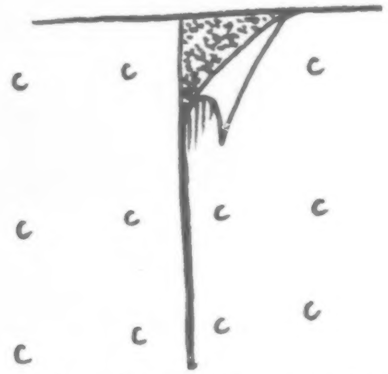
TITLE: Remove Loose Wallboard Surface Paper

Page 1 of 1 page

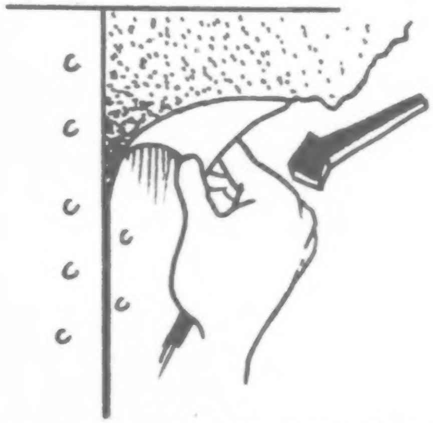
COURSE: Painting and Decorating

UNIT III: Finishing

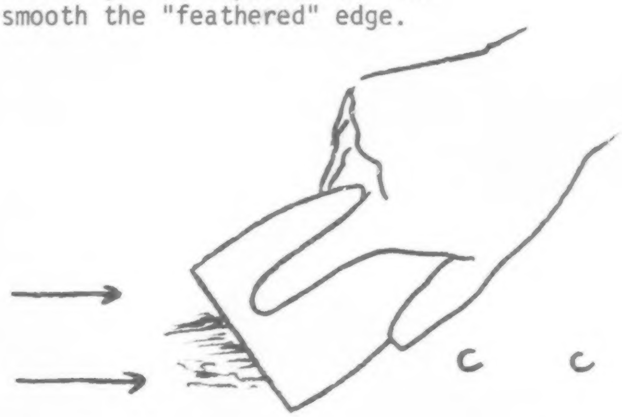
1. Inspect all wallboard surface paper for loose corners or other torn areas.



2. If loose paper is found, gently tear off the loose paper by pulling parallel to the tight edge, so as to produce a thin, "feathered" edge.



3. Using a broad knife, spread a light coat of joint compound over the exposed inner wallboard material and smooth the "feathered" edge.

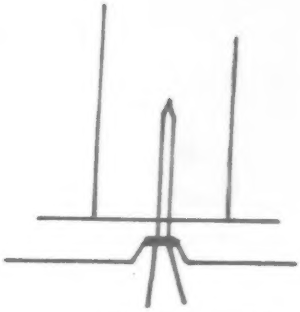


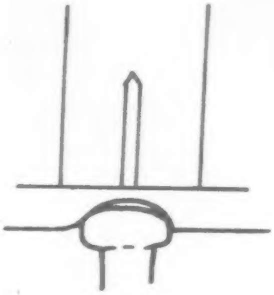
INFORMATION SHEET
IL-3-15

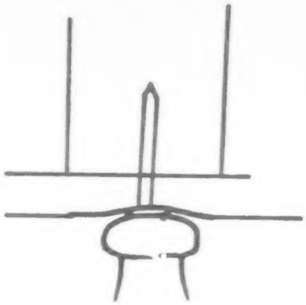
TITLE: Inspect Wallboard Nailing — Page 1 of 1 page

COURSE: Painting and Decorating — UNIT III: Finishing

1. Inspect for loose or poor nailing. Remove and replace loose nails. Set any nails which extend out over the face of the wallboard.


Too Deep with A Nail set


Too Heavy


Ideal

INFORMATION SHEET
IL-3-16

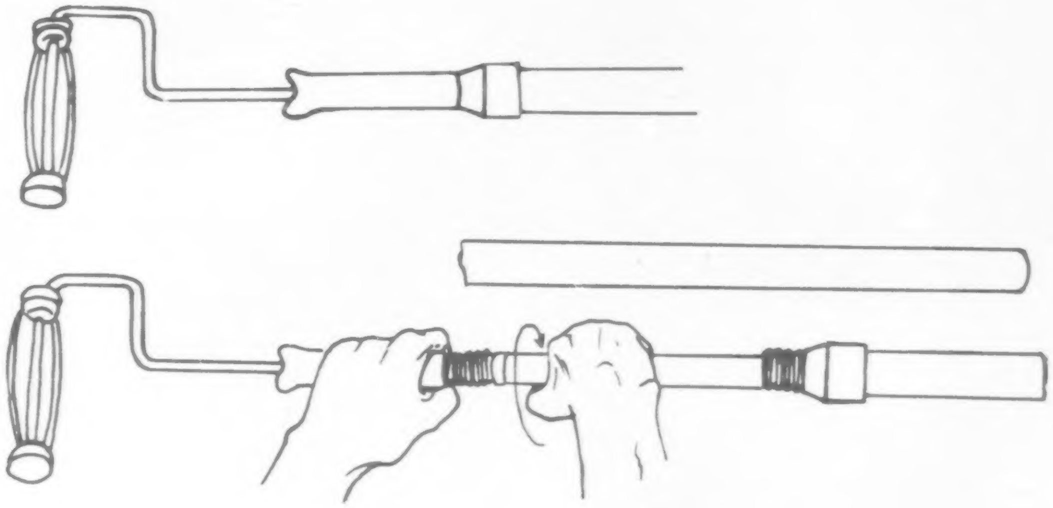
TITLE: Extension Poles

Page 1 of 1 page

COURSE: Painting and Decorating

UNIT III: Finishing

1. Place pole (male end) in handle (female end) of roller frame.
2. Turn clockwise until threads become tight.
3. Pole may be extended by turning locking ring counterclockwise.
4. Slide out extension by pulling on roller handle.
5. Tighten locking nut counterclockwise until firm.



INFORMATION SHEET
IL-4-1

TITLE: Surface Preparation Procedures for Wallpaper
Page 1 of 4 pages

COURSE: Painting and Decorating
UNIT IV: Wallcoverings

INTRODUCTION: In many cases, the surface preparation procedures or requirements for applying wallpaper to the various types of surfaces are the same as those used for preparing a surface for painting. Becoming thoroughly familiar with the various types of surfaces and special and correct surface preparation procedures will avoid many wallpaper job failures. This is particularly important today because of the variety of modern wallcoverings which are available today.

NEW PLASTER WALLS

New plaster should be thoroughly dry before wallpaper is applied to this type of surface. The drying time of new plaster depends entirely upon either the natural or controlled drying conditions which exist immediately following the application of the plaster. The moisture content of new plaster can be accurately tested with the use of a moisture meter.

In some cases, the paperhanger may be asked to apply a wallcovering to a wall which has not been allowed to dry or cure for a sufficient length of time. The application of a coat of a latex wall primer or a pigmented shellac is helpful in preparing a slightly soft or a slightly high moisture content plaster surface for wallpaper.

A problem that frequently arises with new plaster is the presence of free lime in the plaster. This condition is referred to as "hot spots" or an alkaline condition in plaster which causes burning or discoloration in wallcoverings which are applied over this type of surface. New plastered walls may be tested for "hot spots" or excessive free lime by placing a few drops of a solution of 1 gram of phenolpthalein powder in 15 cc. of alcohol to different spots around the room. This solution can be prepared by any druggist. If the spots turn red or pink in color, an alkaline condition exists and must be neutralized by brushing a solution of one pound of zinc sulfate dissolved in one gallon of water to the entire wall surface. This solution must be rinsed from the wall with clear water and allowed to dry before applying the wallcovering. An excessive alkaline problem in plaster can also be solved by applying a coat of pigmented shellac to the plaster surface. Pigmented shellac will not neutralize the lime but will prevent the burning or discoloration of the wallcovering.

PREVIOUSLY PAPERED WALLS

A new wallpaper job cannot be guaranteed if the new wallcovering is applied over an old layer of wallpaper. The paste on the new wallcovering may soften the old wallpaper and cause blisters or in extreme cases, cause large strips of wallpaper to loosen and actually fall from the wall. Hanging new wallpaper over old wallcoverings with special surface effects or colorings, which are not receptive to wallpaper paste, may also cause adhesion problems of the new wallpaper to the old wallpaper.

Old wallcoverings may be removed by soaking the old wallcovering with water using a sponge, brush or a garden type pressure sprayer. Wetting agents are currently on the market which may be added to the water to significantly aid the penetration of the water into the wallcovering. Wallpaper steamers may also be used to remove old wallcoverings and are particularly helpful in removing several layers of wallpaper or wallpaper which has been coated with paint. Before attempting to remove painted wallpaper, the painted surface should first be scored or scratched to break the surface coating to allow water to penetrate into the wallpaper. Never add a wetting agent to the water supply of a wallpaper steamer as these additives will cause excessive foaming of the water.

After old wallcoverings have been removed, the entire wall surface should be washed to remove old pastes or adhesives and wall sizes. It is very important that this step not be omitted because the new wallpaper paste or adhesive may not be compatable with the paste or adhesive which will be used to apply the new wallcovering. If the paste or adhesive is not compatable, a loss of adhesion to the wall will result.

NEW WALLBOARD OR PLASTERBOARD WALLS

All joints between the wallboard panels must be taped and all nails covered with joint compound or a spackling compound. Before finishing joints and nails, always check for loose surface paper on the wallboard and loose nails on the panels between the joints of the wallboard. Loose surface paper must be removed and smoothed with compound; loose nails must be removed and replaced.

Although it is possible to hang wallpaper directly over uncoated wallboard, it is advisable to seal the surface before applying wallpaper. If this is not done, wallpaper removal at a later time will result in damage to the surface paper when wetting and scraping the wallpaper from the surface of the wallboard. The wallboard surface may be sealed by applying an oil or latex wall primer sealer or a coat of pigmented shellac. Sealing the surface with any of these coatings will seal the surface paper of the wallboard and prevent water from penetrating into the wallboard when removing old wallcoverings.

PAINTED WALLS

Painted walls of plaster or wallboard generally provide an excellent foundation for hanging all kinds of wallcoverings. Before applying wallpaper to a painted surface, the following surface preparation procedures should be followed:

1. Always wash greasy or oily painted surfaces with trisodium phosphate (TSP) or another detergent type washing agent.

2. Calcimine paints are frequently found on very old plastered wall surfaces. Calcimine paints are characterized by a chalky or dusty surface when rubbing your hand over the surface. Wallpaper will not adhere to this type of surface. Calcimine must be removed by scraping and washing the surface with warm water snd steel wool. It is often advisable to coat the wall with a wall primer sealer after washing and before applying a wallcovering.

3. All glossy painted surfaces must be dulled before wallpaper is applied to them. The surface may be dulled by wiping or brushing a liquid sanding agent on the surface followed by sanding with a medium grade sandpaper. Low quality enamels may sometimes be dulled by washing the surface with TSP or another strong detergent. Washing is usually ineffective in dulling high quality enameled surfaces.

4. Sand or textured finished wall surfaces must be smoothed before the application of wallcoverings. This may be done by scraping the surface with a stiff bladed broad knife and sanding. The wall should then be primed with a wall primer sealer to tie together any loose surface particles. It is usually advisable to apply a lining paper to the wall horizontally to smooth the surface and provide a good bond between the surface and the new wallcovering.

PLYWOOD OR WOOD PANEL SURFACES

All joints between the wood panels must be taped with a fibreglass tape and the appropriate compound. All nail heads should be countersunk and spackled to provide a smooth surface. If the surface has not been painted, the entire surface should be sealed with a primer sealer coating, followed by a light sanding before applying the wallcovering.

PATCHING PLASTERED WALLS

All imperfections in plaster walls, such as holes, cracks or loose plaster, should be repaired before applying a wallcovering. Minor wall imperfections may be repaired using a powdered spackling compound. The areas to be patched should be wet with water before patching to provide a firm bond to the old plaster. The patched area should then be sanded smooth when the spackling compound has dried. Paste spackling compound may sometimes be used to repair minor surface imperfections in plaster walls, however, these materials may stain or burn the surface of the wallcovering applied over them, very similar to "hot spots" in plaster. If this material is used, the patched area should be coated with pigmented shellac before papering to prevent the staining.

REPAIRING WALLBOARD SURFACES

On old wallboard surfaces, loose nails and broken or loose joint tape may be found. Loose nails must be removed and renailed followed by spackling over the nail depression. Loose tape must be removed by cutting out the loose tape and replacing the tape in this area.

SIZING WALL SURFACES

A wall size is a glue which is applied to the wall surface before applying a wallcovering. A wall size is applied for the following reasons: (1) to provide better adhesion of wallpaper to a wall, (2) even out the porosity of the wall, (3) to permit sliding the wallpaper on the wall for more accurate positioning of the wallpaper, and (4) indicate hot spots in plastered surfaces.

The use of wall sizes is specifically limited to the application of wallcoverings which are applied with a wheat paste. The newer synthetic pastes and adhesives are not compatable with glue sizes. Where sizing is necessary when using these types of pastes or adhesives, the paste or adhesive should be diluted to a thin consistency and applied to the wall as a size.

Many manufacturers of wallpaper pastes and adhesives now provide "pre-sized" paste which eliminates the need for sizing the wall. However, in many cases this does not necessarily preclude the need for sizing the wall for adequate adhesion.

Some manufacturers of jellied glue sizes recommend the addition of the glue size to wheat paste to strengthen the paste and provide improved adhesion. It should be noted that the addition of glue size to wheat paste will increase the staining property of the paste if any paste comes into contact with the surface of the wallpaper.

INFORMATION SHEET
IL-4-2

TITLE: Figure Wallpaper Requirements--
Square Footage Method

Page 1 of 2 pages

COURSE: Painting and Decorating

UNIT IV: Wallcoverings

Every paperhanger should be able to figure how many rolls of wallpaper are required to paper a room. There are two principal ways of figuring the paper needed for a room--the strip method, and the square footage method. There are a number of factors that must be taken into consideration in estimating the number of tools needed, such as the waste due to allowance for cutting and sizes of door and window openings.

The quantity of paper needed for a room may be figured by determining the square footage of the area to be covered, and dividing this figure by the number of square feet in a single roll of wallpaper. The procedure described below can be used for square or rectangular rooms with average size door and window openings.

PROCEDURE:

1. Measure the length and width of the room and add these two measurements together.
   NOTE: Include all door and window openings in measuring the length and width of the room.

2. Multiply this total by 2. The result will be the total length of all walls around the perimeter of the room.

3. Adjust this figure to the next higher foot.
   EXAMPLE: If the perimeter measurement is 35 feet 8 inches, adjust this figure to 36 feet.

4. Measure the height of the wall from the ceiling corner to the top of the base molding.

5. Adjust this measurement to the next higher half foot.
   EXAMPLES: A. If the wall height measurement is 7 feet 3 inches, adjust this figure to 7 feet 6 inches.
   B. If the wall height measurement is 7 feet 8 inches, adjust this figure to 8 feet.

6. Multiply the adjusted perimeter measurement by the adjusted wall height measurement. The result will be the total number of square feet of wall space including all door and window openings.

7. Divide the total number of square feet of wall space by 30. The result will be the number of single rolls of wallpaper needed to cover all walls, including door and window openings.
   NOTE: Every single roll of wallpaper contains 36 square feet of paper, however, because of losses in matching a patterned wallpaper, figure on only 30 square feet of usable paper per single roll. On paper requiring no pattern match, figure 32 feet of usable paper per single roll.

8. Deduct 1 single roll for each 2 average door and window opening.

9. Adjust the answer to the next higher whole number. This is the number of single rolls of wallpaper needed.

TITLE: Types of Paper Paste

COURSE: Paint and Decorating

UNIT IV: Wallcoverings

WHEAT PASTE

Wheat paste is a powdered variety still considered the standard for most uncoated wallpapers because properties of high moisture, good slip, reliable adhesion and low cost are ideally suited for this purpose.

CELLULOSE PASTE

A stainless, transparent paste which should be mixed in plastic pails, since it has a chemical reaction with galvanized metal.

Because of its weak adhesive qualities and tendency to develop dry spots soon after pasting, this material is recommended only for a shiki silk over lining paper.

POWDER TYPE VINYL ADHESIVE

This is a powdered material which develops a very tacky, mold-proof, non-staining quality when mixed with water.

Very porous surfaces should be sized with four parts of water to one part paste for best results.

Because of the high moisture content the material is not recommended for highly sealed surfaces or in areas where it is subject to high humidity such as laundries and bathrooms.

PREMIXED VINYL ADHESIVES

A heavy liquid adhesive having a good initial tack which increases with drying to very tacky. Bending qualities are excellent as well as ability to dry well in absence of air in this low moisture content material.

Since some manufacturer's products are diluted more than others the mechanic has a broad range of material from which to select for many varieties of application.

WHEAT PASTE VINYL ADHESIVE

A paste ideal for light weight vinyls where specifically recommended by the manufacturer of the vinyl, this adhesive has the good as well as bad qualities of ordinary wheat paste.

Slow drying time makes this material extremely susceptible to development of mildew when used under heavy vinyl stock.

VINYL TO VINYL ADHESIVE

Where lapping of vinyl can not possibly be avoided, this material excels.

Vinyl has a material resistance to adhere to itself and,therefore, a very water proof, tacky adhesive is needed.

The vinyl to vinyl adhesive is also indispensable when applying ornamental borders and appliques to vinyl.

If some of the material is overlooked before drying it can be removed with alcohol.

INFORMATION SHEET
IL-4-4

TITLE: Types of Wallpaper Pattern Matches - The Straight Match

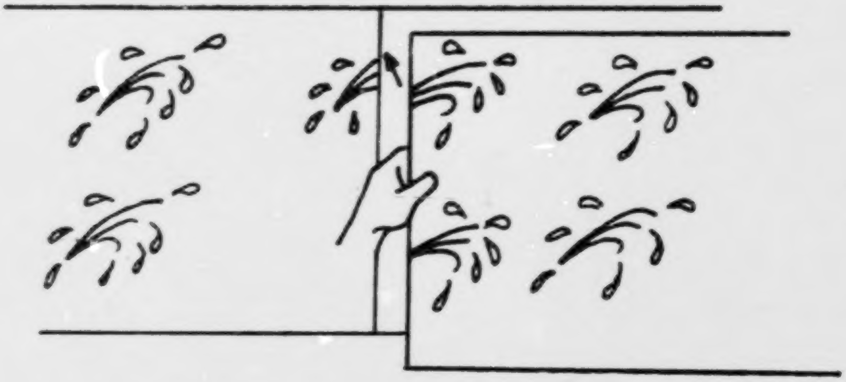
Page 1 of 1 page

COURSE: Painting and Decorating

UNIT VI: Wallcoverings

Before starting to cut a patterned wallpaper in preparation for applying the wallpaper to the wall surface, the paperhanger must first determine the type of pattern match of the particular pattern. There are two types of wallpaper pattern matches; the STRAIGHT MATCH and the DROP MATCH. The straight match match is the simplest pattern match to determine and cut. The straight match is sometimes referred to as the straight across match or the square pattern match.

A straight match pattern is one where an element in the design on one side of the wallpaper matches an element directly across the width of the wallpaper on the other side. When these elements are placed side by side, the figure in the pattern is completed.



When the type of pattern match has been determined, the design must be studied carefully so that full justice is done to the pattern. Carelessness in this respect can easily destroy the effect of a beautiful design. Certain wallpapers carry a foundation pattern which is quite obvious to the eye when the wallpaper is on the wall, and placement of this pattern is of utmost importance.

First, select the largest or most dominant element in the design. If the pattern is one of small endless repeats, this is not necessary.

When this determination has been made, the ceiling line of the pattern can be established. The ceiling line of the pattern is the point in the pattern which is placed in the corner formed by the side wall and the ceiling of the room. The ceiling line of the pattern can be thought of as the border of the pattern around the room. The ceiling line should always be placed immediately above the largest or most dominant element in the pattern design.

INFORMATION SHEET
IL-4-5

TITLE: Types of Wallpaper Pattern Matches - The Drop Match

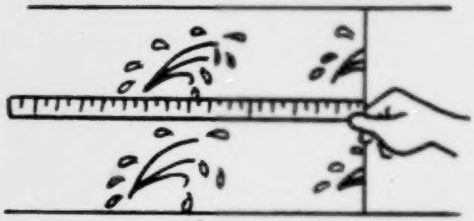
Page 1 of 1 page

COURSE: Painting and Decorating

UNIT IV: Wallcoverings

The drop match is the most difficult of the two pattern matches to determine and cut. On a drop match, the pattern does not match at a 90° angle as on a straight match, but rather, the pattern match is staggered. The drop match is also sometimes known as a half match.

A drop match pattern is one where an element on one side of the pattern matches an element on the other side of the pattern midway between the length of a pattern repeat. The match can be determined by selecting an element on the left side of the paper. Fig. 1. Measure the length of the pattern repeat. Fig. 2. Mark the middle of the pattern repeat. Fig. 3. From this mark, square across to the right side of the paper. The match to the selected element on the left side will be completed on the right side at this point. Fig. 4. When these elements are placed side by side, the pattern match is completed. Fig. 5.



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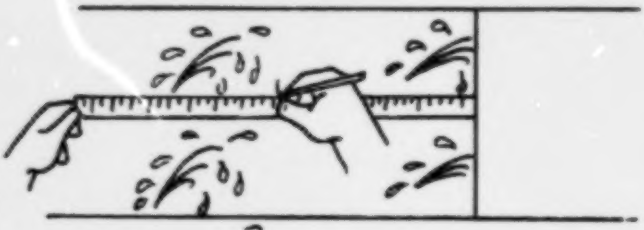

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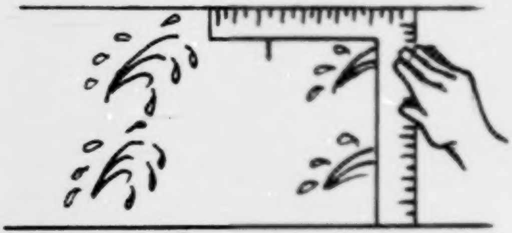

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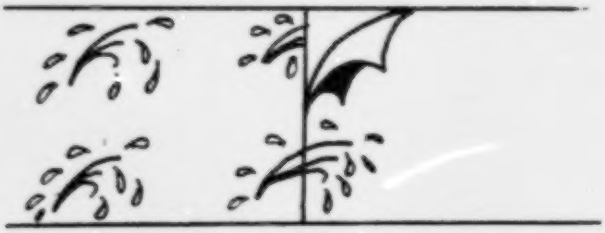

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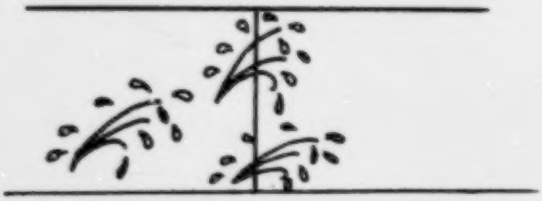

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As on a straight match pattern, the most dominant features of the pattern be selected. The ceiling line of the pattern will be established above one of the dominant features. On most drop match patterns, cutting through other dominant features of the pattern cannot be avoided.

INFORMATION SHEET
IL-4-6

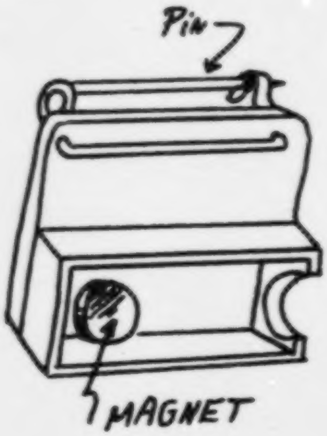
TITLE: Razor Knife Holder Page 1 of 1 page

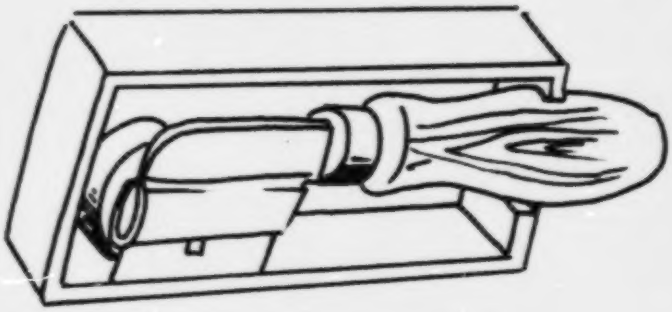
COURSE: Painting and Decorating UNIT IV: Wallcoverings

1. Pin the razor-knife holder (magnetic) on the front chest area on your bib coveralls.

   SAFETY: The razor knife must be handled carefully. During the work processes the razor-knife should be held secure and safely secured in a safe place on one person.

2. The cutting edge of the razor-knife should be placed against the magnet blade edge down.





INFORMATION SHEET
IL-4-7

TITLE: Hanging Wallcovering Around Inside and Outside Corners

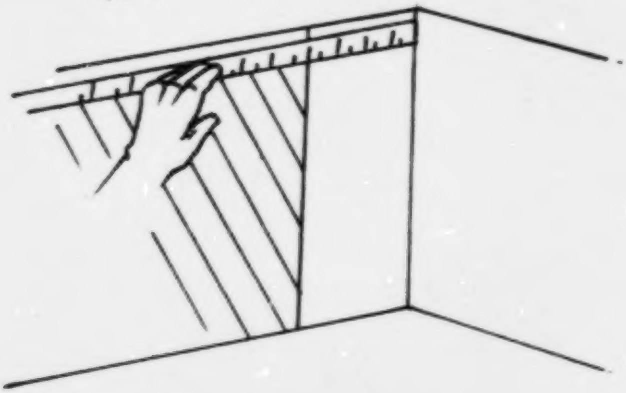
Page 1 of 3 pages

COURSE: Painting and Decorating

UNIT IV: Wallcoverings

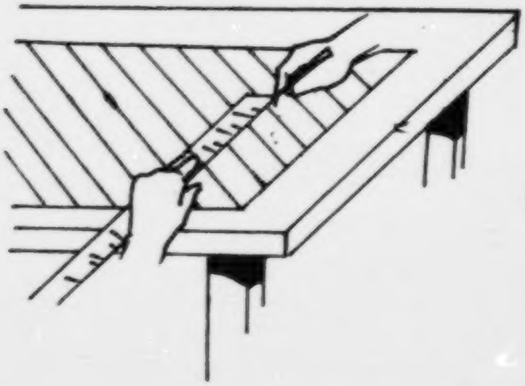
1. Paste a full length and width strip and fold into bookfold.

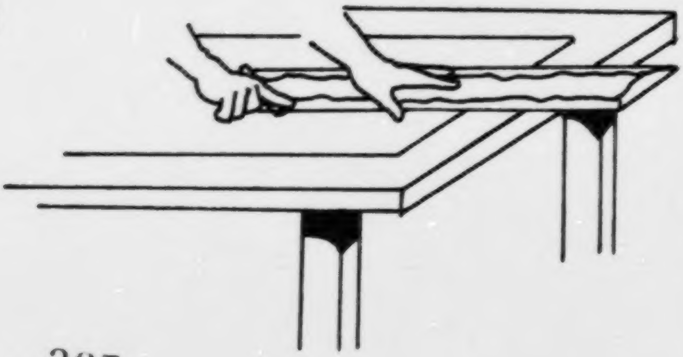
2. Measure the distance from the edge of the last strip of wallcovering on the wall to the corner and add 1/8" to this measurement. Take a measurement at no less than four points along the length of the corner and use the widest measurement as the width to which you will add the 1/8".



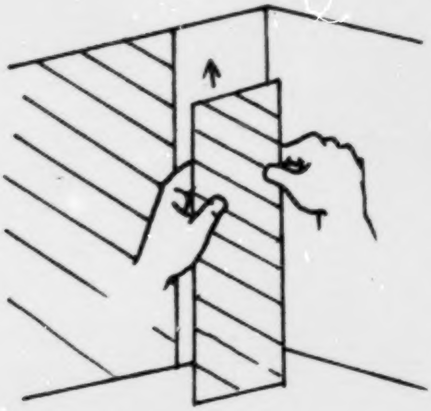
3. Mark the required width on the pasted and folded strip, at both ends of the strip. With the straightedge aligned directly over these marks, cut along the straightedge with the razor blade in the blade holder. Be sure to place the zinc strip under the straightedge before cutting.

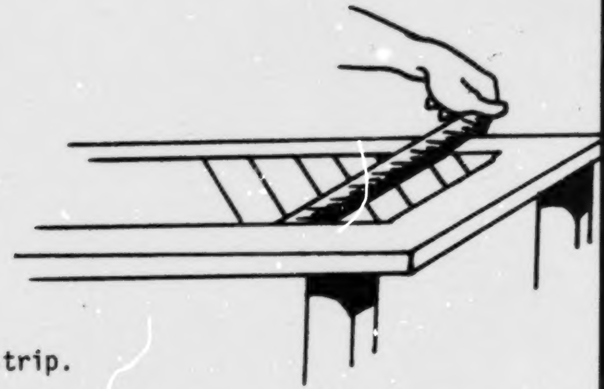
   NOTE: Be sure the required width is marked and cut from the proper side of the pasted strip.





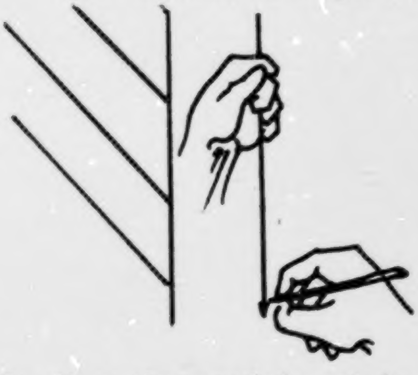
4. Hang the strip to fit from the last full strip into the corner.

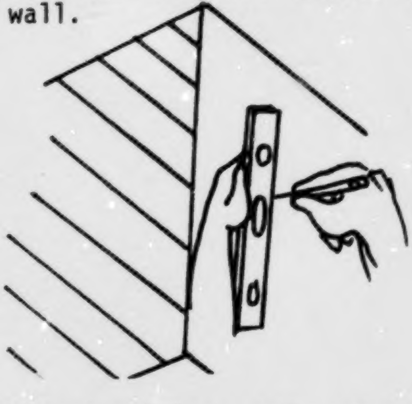




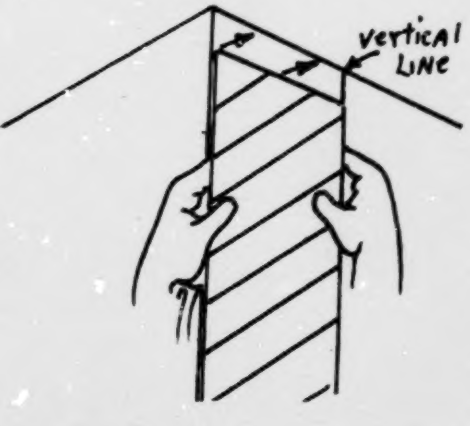
5. Measure the width of the remaining strip.

6. Mark off the width of the remaining strip on the next wall. Mark a vertical line from the mark using the plumb bob or spirit level. Mark the vertical line the entire height of the wall.

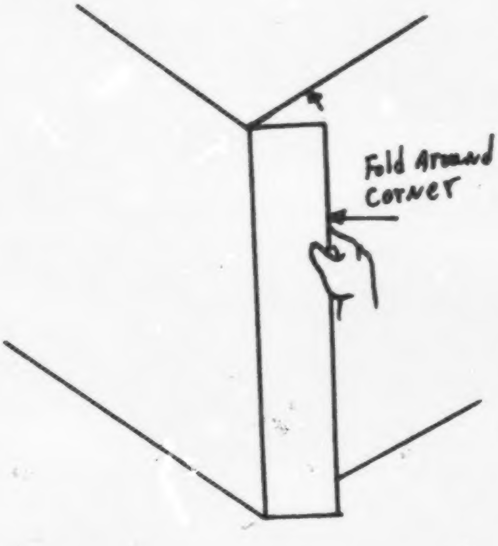


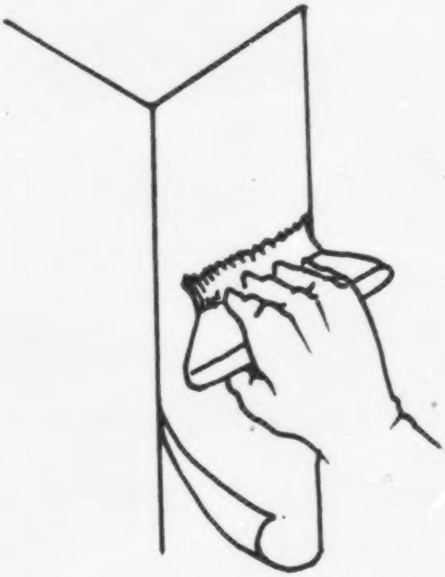


7. Hang the remaining strip to the vertical line while maintaining the pattern match in the corner.



8. For outside corners, the full width strip may be folded around the corner if the corner is perfectly straight. If not, follow the same procedure used for inside corners as described in steps 2, 4, 5, 6 and 7.





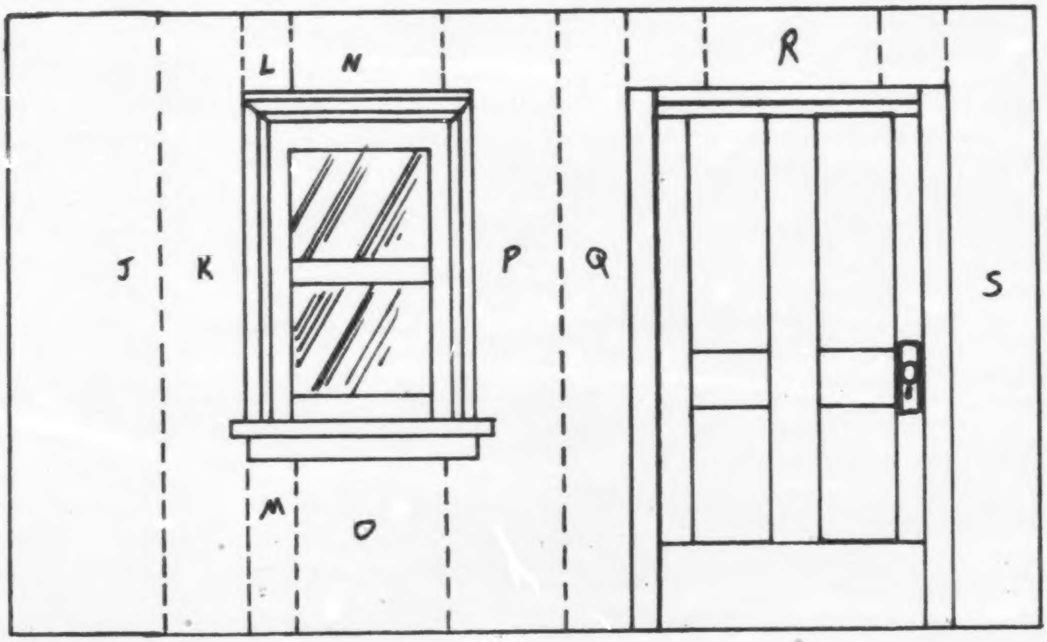
INFORMATION SHEET
IL-4-8

TITLE: Hanging Wallcovering Around Doors and Windows

Page 1 of 1 page

COURSE: Painting and Decorating

UNIT IV: Wallcoverings



Please refer to the above illustration.

After hanging strip J there is not room enough for strip K. There are two methods of coping with this situation.

1. Strip K can be smoothed out along the left side and the right side creased against the frame of the window. Then with the shears cut the protruding edge of the paper at the top and bottom of the frame so that these ends of the papers can be smoothed out. The paper remaining can then be cut away with a casing knife or razor blade.

2. It is generally easier to trim strip K at the right so that it fits against the casing. Then cut pieces L and M from the strip which has been trimmed and put them in position without any overlap.

After hanging strip K, take the next strip and cut off pieces at the top and bottom for spaces N and O. Save the middle of the strip as it may furnish a matching piece for space R.

INFORMATION SHEET
IL-4-9

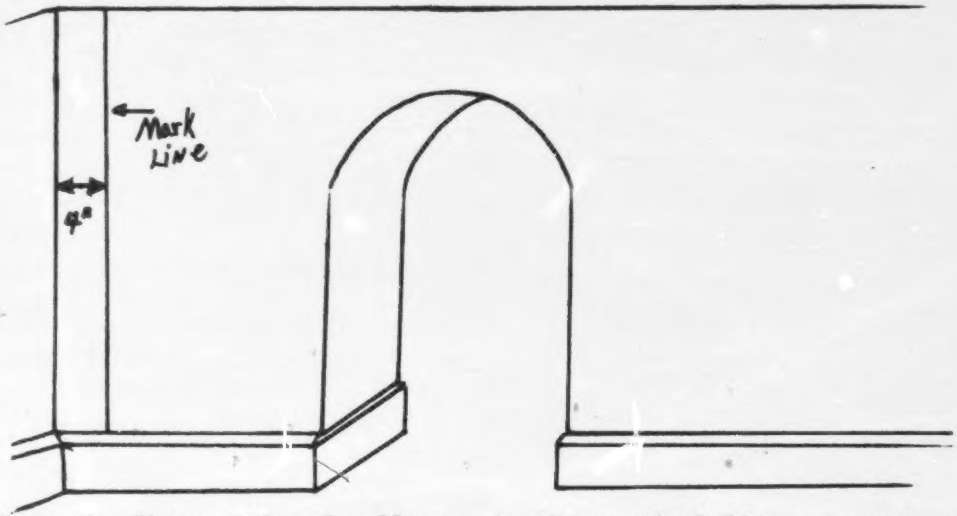
TITLE: Wallpapering an Arch Opening

Page 1 of 3 pages

COURSE: Painting and Decorating

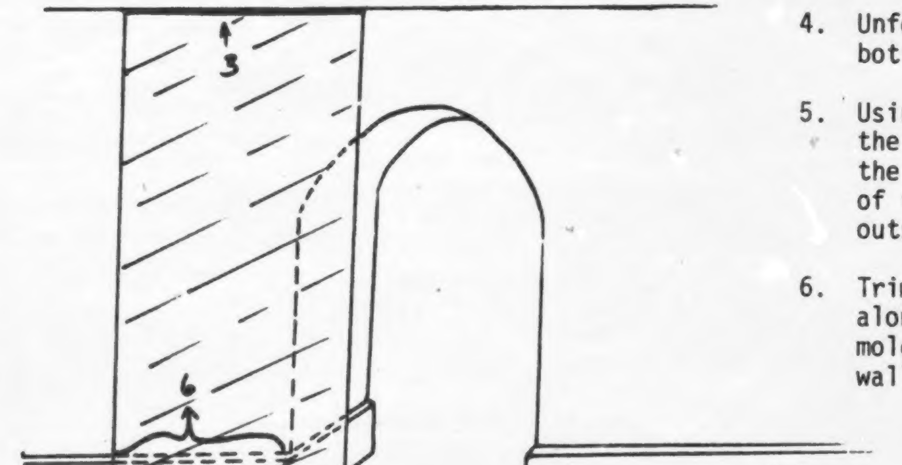
UNIT IV: Wallcoverings

1. Using a 4' spirit level, mark a line from the left side of the wall. Be sure to check the straightness of the outside corner of the archway before proceeding any further.



2. Hang the first strip of wallpaper to the vertical line. Do not unfold the short fold at the bottom of the strip.

3. Trim the top of the strip at the ceiling corner.



4. Unfold the short fold at the bottom of the strip.

5. Using shears, make a cut from the bottom of the strip to the corner formed by the top of the base molding and the outside edge of the arch.

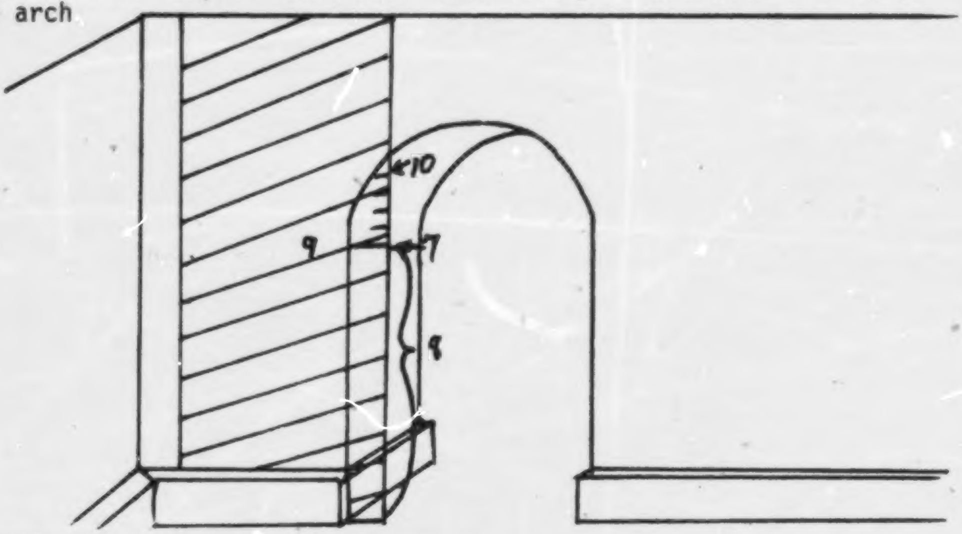
6. Trim the bottom of the strip along the top of the base molding on the outside of the wall.

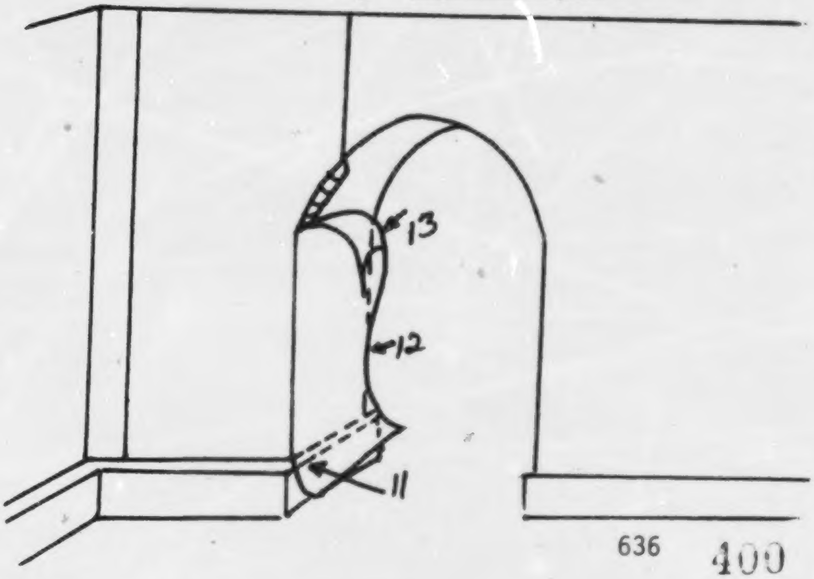
7. Using the shears, cut a horizontal line from the right side of the strip to the outside edge of the arch at the point where the arch starts to turn or curve.

8. From this out to the bottom of the arch fold the strip around the inside of the arch. Fold around the corner firmly and brush out the paper to remove all air bubbles.

9. Using a razor blade or shears, cut the paper at the curved top of the arch. Be sure to follow the curve of the arch. Cut the paper at least 1/2" wider than the arch.

10. With the tip of the shears, cut slits 1" apart in the 1/2" extending beyond the curved top of the arch. Then firmly fold around the inside of the arch



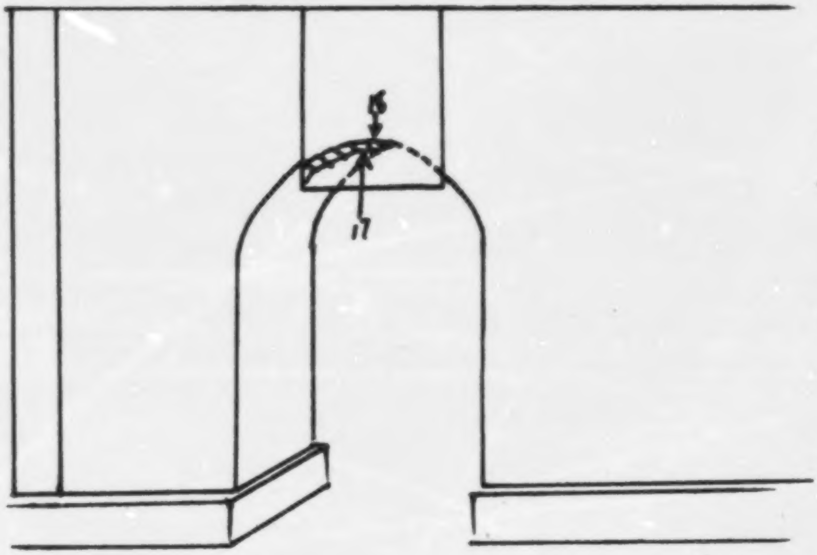


11. Trim along the top of the base molding on the inside of the arch.

12. Trim off the excess paper extending beyond the inside edge of the arch by slowly sliding the razor blade alon the edge.

13. Pull the top of the trimmed strip inside the arch loose the wall about 1" and allow dry in this position. This seam will be double cut when finishing the inside top of the arch.

14. Cut a pattern matching short strip for the center of the archway. Cut the strip at least 3" longer than the longest point of the arch.



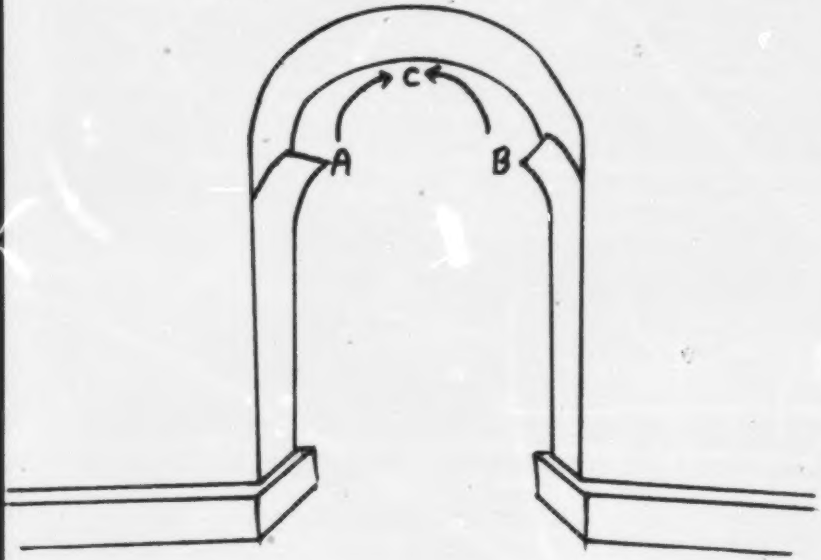
15. Hang the short strip.

16. Trim the strip at the ceiling corner.

17. Using a razor blade or shears, cut the strip 1/2" longer than the curved arch. Again, be sure to follow the curve of the arch.

18. Cut slits 1" apart in the 1/2" extending below the arch and fold around the inside edge of the arch.

19. Hang the second full length strip to complete the outside of the arch. Follow the same procedure to hang this strip as described in steps 2-13.



20. Finish off the inside top of the arch by taking ends of rolls and matching the pattern on the inside of the arch from points marked A and B. Cut these strips to a length that will reach the center of the arch, point C. Both strips must be cut at least 1" longer than actually needed at both the top and bottom of the strip.

21. Hang these strips. When joining the pattern at points A, B, and C, all seams must be double cut.

22. Trim the sides of these strips to the width of the arch by gently sliding a single edge razor blade along the sides of the arch. Roll these seams down firmly with a seam roller after the trimming is completed.

INFORMATION SHEET
IL-4-10

TITLE: Hanging Ceiling Paper | Page 1 of 2 pages

COURSE: Painting and Decorating | UNIT IV: Wallcoverings

Measure from corner of ceiling and side wall the width of the paper less 1/2" (to be lapped down side wall) and mark. Make this measurement at several points from one side of room to the other to be sure the 1/2" is adequate.

Snap a chalk line from the two marks closest to the opposite walls to establish a straight line to which the first strip of paper will be positioned.

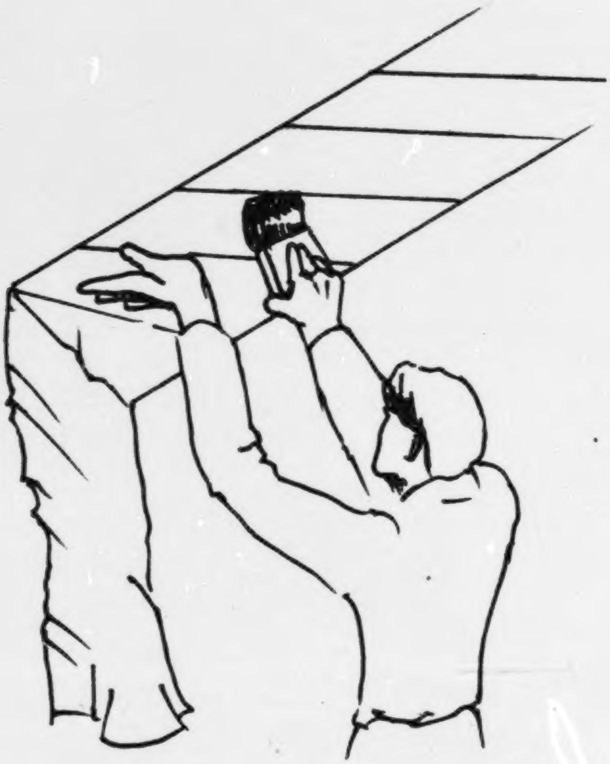
Measure the distance between the opposite walls to acquire the length of the ceiling paper strips. Add 1 full inch to this measurement to allow for a 1/2" lap at each end.

Paste full length and width of the cut pieces as you are ready to hang them. Book fold these pieces as they are pasted.

Holding the folds in one hand and the short end in the other, begin to hang paper. Place stock to ceiling so 1/2" laps down over the wall at end being hung first. Be sure to butt stock securely into corner with smoothing brush so the fold holds the paper in place.

Gradually smooth paper onto ceiling with smoothing brush with one hand while other hand supports the book folded end of strip.

As more stock is required in crossing the ceiling let the book folds unfold one at a time as needed while carefully smoothing stock to ceiling.



When the opposing wall has been reached butt the paper stock into the corner as done when starting.

The succeeding pieces of stock should be pasted and hung just as the first (according to the preceeding information). Be sure each succeeding piece of stoc is neatly butted to the previous piece at the seam.

Roll the seams to secure and continue with the succeeding stock until the ceiling is completed. Be sure to hang the last piece so there is the before mentioned 1/2" lap down onto the side wall.

INFORMATION SHEET
IL-5-1

TITLE: Faulty Spray Patterns--Causes and Remedies

Page 1 of 3 pages

COURSE: Painting and Decorating

UNIT V: Spray Painting

In order to apply a uniform and smooth coat of paint when spray painting, a good spray pattern must be established before starting to paint. The two most important factors in establishing a good spray pattern are:

1. Proper adjustment of the fluid and air passing through the gun for the proper atomization of the paint.

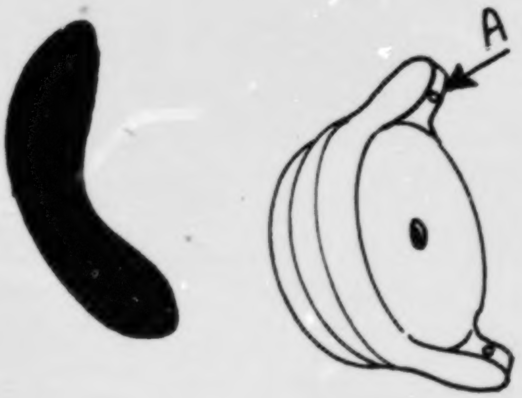
2. Using spray equipment which has been properly cleaned and maintained.

Most problems associated with establishing a good spray pattern are usually caused by improper adjustment of the gun and an improperly cleaned gun. Some of the most common types of faulty spray patterns, the cause and remedy for each, are listed below. To become proficient at spray painting, the operator must be familiar with all problems associated with spray painting.

FAULTY PATTERNS AND HOW TO CORRECT THEM

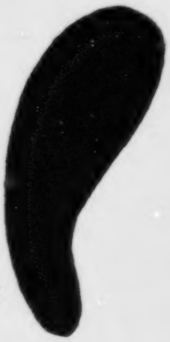
Dried paint in side port "A" restricts passage of air through port on one side. Results in full pressure of air from clean side port in a fan pattern in direction of clogged side.

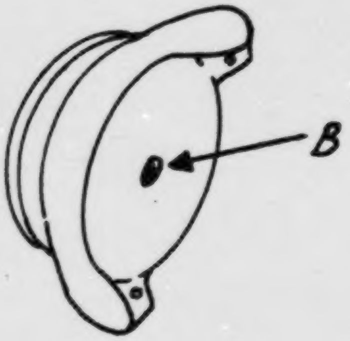
REMEDY: Dissolve paint in side port with thinner.



Dried paint on the outside of the fluid nozzle tip at position "B" restricts the passage of atomizing air at one point through the center ring opening of the air nozzle. This faulty pattern can also be caused by a loose air nozzle, or a bent fluid nozzle or needle tip.

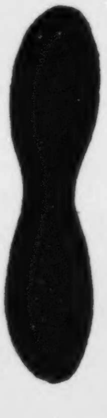
REMEDY: If dried paint is causing the trouble, remove the air nozzle and wipe off the fluid tip using a wiping rag moistened with thinner. Tighten air nozzle. Replace fluid nozzle or needle if bent.

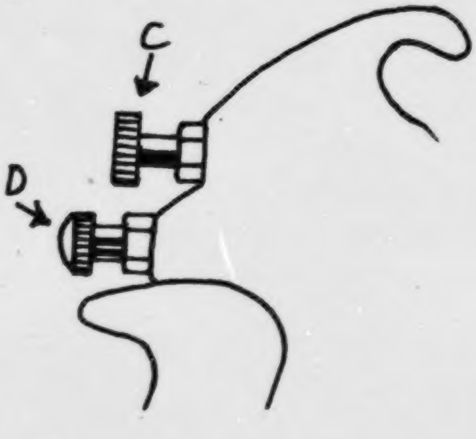




A split spray pattern (heavy on each end of the fan pattern and weak in the center) is usually caused by: 1) atomizing air pressure, too high; 2) attempting to get too wide a spray with thin paint; 3) not enough paint available.

REMEDY: 1) Reduce air pressure; 2) Open material control "D" to full position by turning to the left. At the same time, turn spray pattern adjustment "C" to the right. This reduces the width of the spray but will correct a split spray pattern.

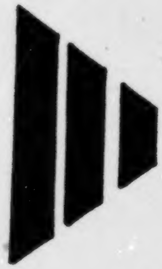


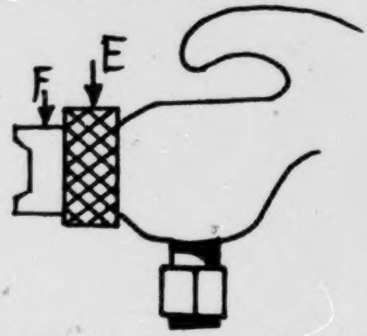


1. Air entering the fluid supply.
2. Dried packing or missing packing around the needle valve which permits air to get into fluid passageway.
3. Dirt between the fluid nozzle seat and body or a loosely installed fluid nozzle.
4. A loose or defective swivel nut, siphon cup or material hose.

REMEDY:

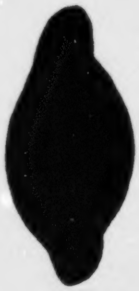
1. Assure all fittings and connections are tight.
2. Back up knurled nut (E), place two drops of machine oil on packing, replace nut and finger tighten. In severe cases, replace the packing.
3. Remove fluid nozzle (F), clean back of nozzle and nozzle seat in the gun body using rag wet with thinner, replace nozzle and draw up tightly against gun body, using the proper tool.

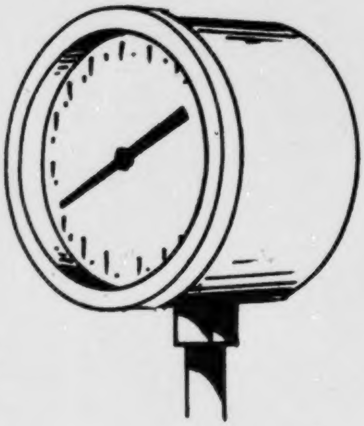




A fan spray pattern that is heavy in the middle, or a pattern that has an unatomized "salt and pepper" effect indicates that the atomizing air pressure is not sufficiently high, or there is too much paint being fed to the gun.

REMEDY: Increase pressure from air supply. Correct air pressure until the paint is atomized into fine particles or reduce the amount of paint flowing through the gun.





INFORMATION SHEET
IL-5-2

Page 1 of 2 pages

TITLE: Spray Painting--Spraying Faults, Gun Failure--Remedies to Correct These Problems.

COURSE: Painting and Decorating

UNIT V: Spray Painting

Many factors enter into the proper function of a spray gun and the satisfactory application of paint when using a spray gun. You must be able to recognize any problems that develop and be able to identify the possible cause of the problems in order to become proficient in the use of a spray gun. On the following pages, some of the most common spraying faults are listed with the possible cause and remedy to overcome the problem.

FAULT	CAUSE	REMEDY
Sags or runs	1. Dirty air cap or fluid tip.	1. Remove cap and fluid tip and clean with lacquer thinner.
	2. Gun held too close to the surface.	2. Hold the gun a little farther from surface.
	3. Paint thinned too much.	3. Pour paint back into original container and add properly thinned paint to suction cup.
	4. Moving gun across the surface too slowly.	4. Move the gun a little more quickly.
Streaks	1. Not overlapping strokes correctly.	1. Overlap previous stroke by 50%.
	2. Gun held at wrong angle to the surface.	2. Hold the gun at a 90° angle at all times.
	3. Split spray pattern.	3. Reduce air or change air cap.
Orange Peel	1. Paint not thinned enough.	1. Add correct amount of thinner.
	2. Gun not spraying a wet enough coating.	2. Move the gun a little more slowly to give a wet coat, but quickly enough to prevent runs.
	3. Using wrong air cap.	3. Choose correct air cap for the material being sprayed.
	4. Wrong thinner used to thin the paint.	4. Use thinner recommended by the manufacturer.
	5. Gun too far from or too close to the surface.	5. Vary the distance the gun is held from the surface.

Too much spray fog	1. Air pressure too high	1. Adjust air pressure at supply.
	2. Gun held too far from the surface.	2. Move gun closer to the surface.
	3. Paint too thin.	3. Use correct amount of thinner.
	4. Spraying too far past the edge of surface.	4. Release the trigger just as the gun passes the edge of the object.
Gun will not spray	1. Out of paint at supply to the gun.	1. Add paint to supply.
	2. Piece of grit, dirt, skin or paint blocking air cap or fluid tip.	2. Remove air cap and fluid tip. Clean in lacquer thinner. Strain paint before using.
	3. Damaged fluid needle.	3. Replace fluid needle.
Paint sputters when coming from the gun	1. Fluid nozzle not tightened properly.	1. Tighten the fluid nozzle firmly.
	2. Not enough paint in the suction cup.	2. Refill the cup.
	3. Vent of suction cup clogged with paint.	3. Clean air vent.
	4. Fluid passageway obstructed.	4. Remove fluid needle, tip, and tube. Clean thoroughly and replace these parts.
	5. Paint is too heavy for a suction feed gun.	5. Add additional thinner to the paint.

POINTS TO REMEMBER:

If a spray gun is cleaned properly and thoroughly after each use, most spraying problems will be eliminated. Always strain the paint before spraying, no matter how clean the paint may seem to be. Bits of dirt can get into the paint when it is being stirred.

Never use a metal object, such as a wire or nail, to clean any openings in the spray gun. These openings are precision machined and wire or nails can damage the openings, causing the spray pattern to become distorted.

INFORMATION SHEET
IL-6-1

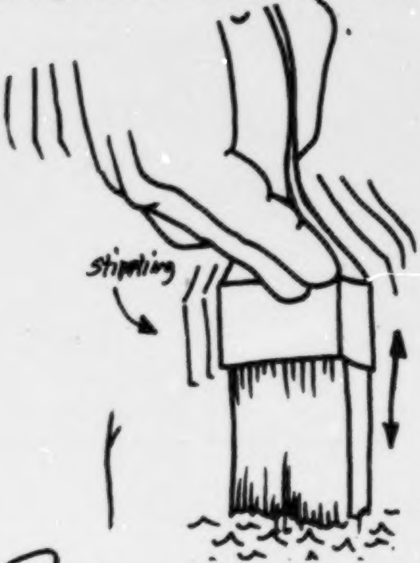
TITLE: Applying Textured Paint
Page 1 of 2 pages

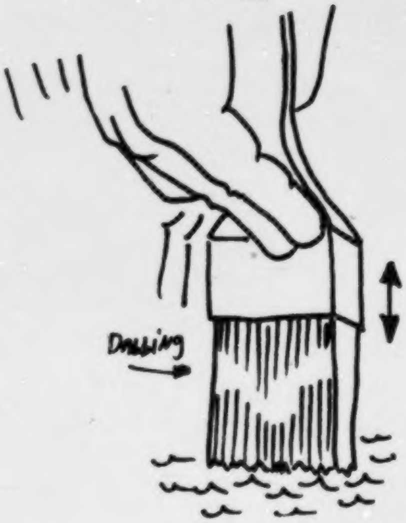
COURSE: Painting and Decorating
UNIT VI: Special Finishes

Texturing a surface can be used for beautification or to hide imperfections in the substrate.

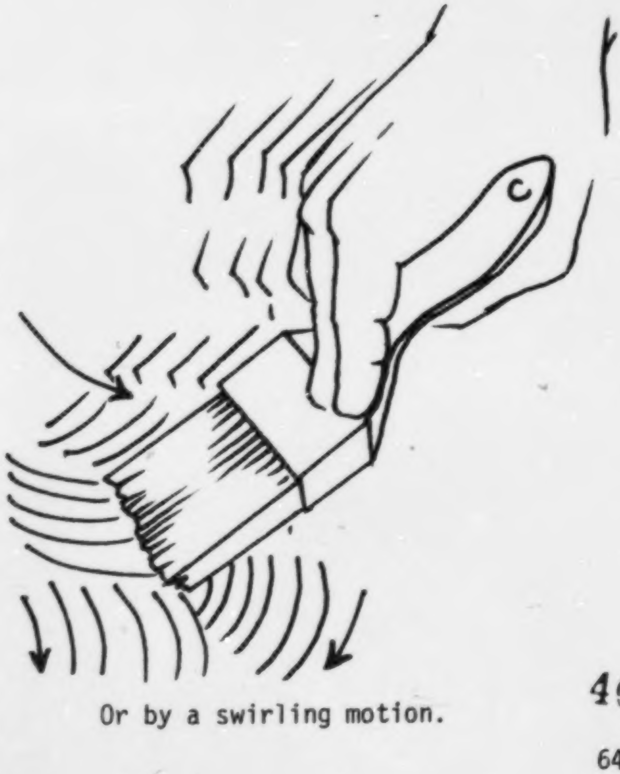
Application can be done in a multitude of ways descriptions of which follow.

By brushing the texture paint onto the surface generously, a thick build-up is achieved. Finishing can be done with a brush in a stippling motion;

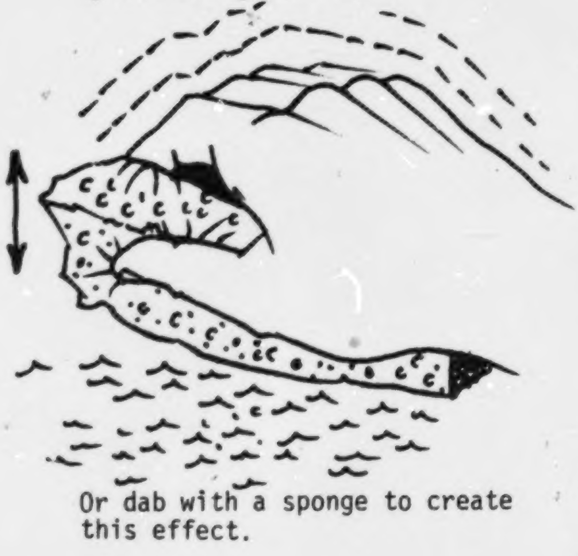




By a dabbing motion;

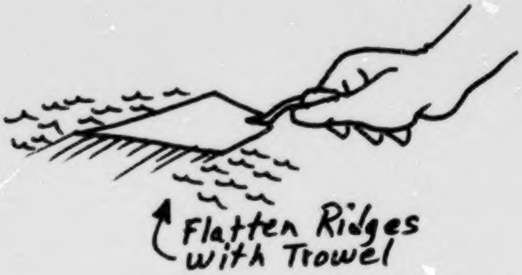


Or by a swirling motion.



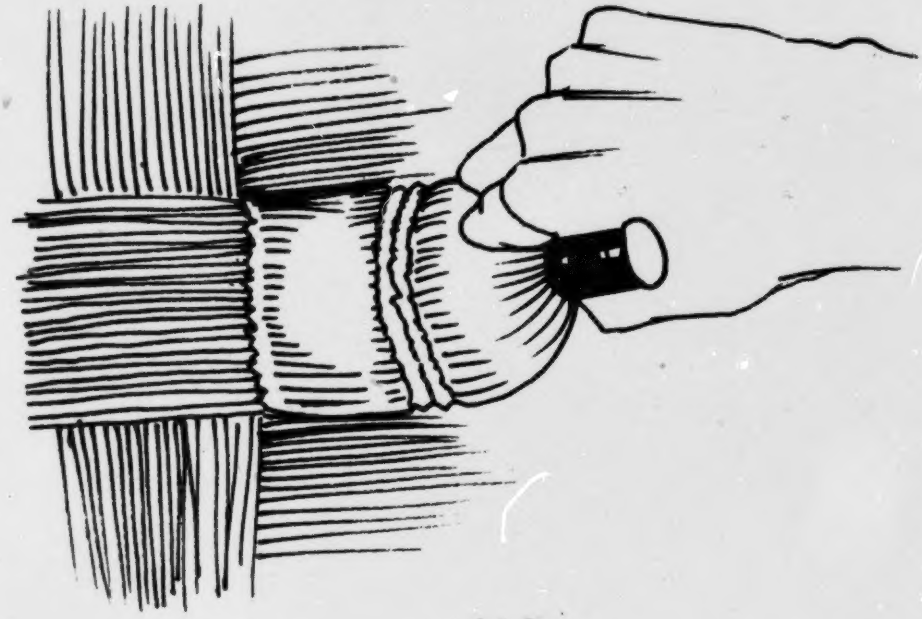
Or dab with a sponge to create this effect.

If the dabbing is done with the brush and the peaks are left to set-up slightly and then lightly troweled down, the effect is similar to "spanish plaster".



The above effect can be achieved also by applying the textured material with a 1-1/2" nap roller cover. This long nap peaks the paint simular to the brush-the peaks are left to set slightly and troweled as above in the brush method.

Another alternate design achieved with a dry wisk broom or brush is illustrated here but the number of designs and ideas for achieving them are limited only by your imagination.



ASSIGNMENT SHEET

TITLE: Types of Ladders

Page 1 of 2 pages

COURSE: Painting and Decorating

UNIT III: Finishing

TEXT/REFERENCES:

Goodheart-Willcox's PAINTING AND DECORATING ENCYCLOPEDIA. pp. 58-62.
Audel's PAINTING AND DECORATING MANUAL. pp. 64-75.

ASSIGNMENT: Read carefully the references and complete the following questions:

1. Ladders are made of various materials.

   A. In a wooden extension ladder, the slide rails should be made of______________ or______________________.

   B. The rungs of wooden extension ladders should be made of______________________ or______________________.

   C. The two materials most commonly used in metal ladders are____________________ and______________________.

2. Write a brief description of the following:

   A. Stepladder ______________________________________
   ____

   B. Extension ladder ________________________________
   ____

   C. A ladder ______________________________________
   ____

   D. Ladder Shoes ___________________________________
   ____

   E. Straight Ladder _________________________________
   ____

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3. What protective treatment should be used on a new wooded ladder? ______________________

4. The overlap of an extension ladder should be ______ feet.

5. The distance the foot of an extension ladder should be from the building is __________ of its height.

6. The bottom of a 44' ladder should be _________ feet from the building when fully extended.

7. List at least 5 safety rules for extension ladders.
    1. ______________________
    2. ______________________
    3. ______________________
    4. ______________________
    5. ______________________

8. _______° is the correct angle to set an extension ladder.

9. If you were considering the purchase of a 40' extension ladder, of what material would it be made, and why?

____

____

10. The name of the objects which are used with ladders and planks are called ______________________.